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ABSTRACT

The guide was developed by the coordinating teachers of the Developmental Vocational Education Program for the fifth and sixth grades in the Model Cities area of Cleveland, Ohio. The purpose of the guide is to strengthen the students' ability to select and acquire a positive attitude toward work, toward all levels of occupational choices found in society, and toward themselves. To these ends, the students in grades 5 and 6 are presented with information on the broad range of available occupations and their requirements through the fifteen occupational clusters identified by the Office of Education's Bureau of Adult, Technical, and Vocational Education. The students experience career orientation through fields trips, work simulation games, and role playing and obtain experience in basic job skill operations. Clusters are to be integrated with the social studies program at the teacher's discretion. The guide uses the conceptual approach, and specific behavioral objectives are listed. Vocabulary lists, learning experiences, desired outcomes, and instructional and resource materials are also listed. Each unit is introduced by a brief discussion of the content area. A four-page annotated bibliography is included. (AG)

ED 089113

CAREER DEVELOPMENT CURRICULUM GUIDE

1970 - 1978

ELEMENTARY

Fifth & Sixth Grades

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DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

(DVEP)

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CLEVELAND PUBLIC SCHOOLS

CLEVELAND, OHIO

1973

...Creating Bridges Between School and Earning a Living...

CE001169

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"Strong claims are being made for career education's efficacy. To the extent that the concepts are not untried, there is already evidence in experiment and demonstration. But given the high mortality rate of panaceas in recent times, it is wise to leave room for uncertainty. Some of it may not work because of being improperly done. In such a broad concept some applications are likely to be unsuccessful. But the experiment is sufficient to promote reasonable high success probabilities to major aspects of the notion where they are carefully thought through and well administered".[1]

---

[1]Kenneth B. Hoyt, Rupert N. Evans, Edward F. Mackin, and Garth L. Mangum, "Career Education: What It Is," Career Education-What it is and how to do it. Salt Lake City, Utah: Olympus Publishing Company, 1972, p. 16.

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Developmental Vocational Education Program

FOREWORD

A new emphasis is being placed on the development of technical-vocational programs in the Cleveland Public Schools in line with our goal of providing quality education to all Cleveland children.

A reevaluation of programs is being made, existing programs are being upgraded, and new programs are being offered.

This "five to twelve" Career Development Curriculum Guide outlines the Cleveland program of training in Career Education.

Paul W. Briggs
Superintendent of Schools

PREFACE

This curriculum guide has been developed by the co-ordinating teachers of the Developmental Vocational Education Program which is funded under Part D of the Vocational Education Amendments of 1968. This program is being administered and implemented by the Cleveland Board of Education in cooperation with the Model Cities Association of Cleveland.

The material and information that is needed to implement this program has been gathered by the Co-ordinating Teachers and Vocational Aides from the local business world.

STATEMENT

This Exemplary Project in Vocational Education is conducted under Part D of the Vocational Education Amendments of 1968, P.L. 90-576.

The schools in the Model Cities area in Cleveland, Ohio are presently bounded by East 55th on the West, East 79th on the East, Superior Avenue on the North, and Kingsbury Run on the South. This amendment was designed to assist the cities in raising the standards of living for those locked into the target areas of selected cities.

During the summer of 1972, approximately sixty classroom teachers, department chairmen and guidance counselors prepared curricula materials and selected visual aids that formed the nuclei for this Career Development Curriculum Guide.

The purpose of this guide is to strengthen the students' ability to select and acquire a positive attitude toward work, toward all levels of occupational choices found in society, and toward themselves as prospective employees and their employers.

The results of these individuals during the summer of 1972, warrants our thanks and appreciation.

William I. Sims
Project Director
Developmental Vocational Education-
Program

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PHILOSOPHY

Cleveland Public Schools

It is through education that a society not only transmits to individuals, but also reinforces for them, the values, skills, understandings, and standards of behavior through which society renews and repairs itself.

The responsibility for education is properly viewed as a partnership featuring a complementary and supplementary relationship among such agencies as organized religion, social and welfare agencies, cultural institutions, governmental agencies, and mass media as well as the schools. All these agencies support the family as the basic unit of personal and social development.

In a democratic society the school should create an environment in which young people will receive an integrated view of their culture, come to accept the basic assumptions of democratic behavior, and acquire a body of common knowledge essential for effective citizenship.

PHILOSOPHY

Developmental Vocational Education

Through the concept of career education all educational experiences, curriculum instruction, and counseling should be geared to preparation for economic independence and an appreciation for the dignity of work.

DVEP embodies the main thrust of career education, that is, to prepare all students for a successful life of work by increasing their options

for occupational choice, by eliminating barriers, real and imagined, to attaining job skills, and by enhancing learning achievement in all subject areas and at all levels of education.

PROGRAM DESCRIPTION AND OBJECTIVES

In cooperation with the Model Cities, the overall goal of the DVEP project is to create a bridge between school and earning a living. This is done through a career development program beginning in elementary school and continuing through high school. It provides students with a broad base of vocational information and exploratory experiences on which to base career decisions, with skill training to enable them to secure employment or undertake future training in the field of their choice and with actual job placement. Thus, the program is designed to increase options for making occupational decisions; to eliminate real and imagined barriers to attaining job skills; and to enhance learning achievement in all subject areas and at all levels of education for the youth in high poverty Model Cities area schools.

The program is developmental in nature and pyramidal in design. It begins with a broad informational/organizational approach at the elementary level, and is narrowed to an exploratory/preparational approach at the senior high level. Such an approach is designed to put the student at each level in a position to make informed decisions as to the next step in his career development and successively narrow his vocational preference.

Beginning at the upper elementary school level, students in grade five and six acquire reliable and valid information on on the broad range of available occupations and their requirements.

The program is worked in conjunction with the Social Studies classes. The emphasis is on occupational clusters rather than on specific jobs, including future occupational areas which are expected to emerge as a result of new technology. The students are to become oriented to the world of work through multi-faceted experiences including field trips, work simulation games, and role playing, and are to obtain experience in basic job skill operations.

At the junior high school level, the orientational-explorational aspect of the program involves learning the functional interrelationships between the production, management, and the service areas of business and industry. Students also sample the operations and skills required in a number of occupations through work-site tours and experience.

Finally, at the senior high level the program orientation is toward exploration and preparation for actual job placement beyond school. Students move from exploratory experiences in a number of occupational areas to intensive training in one skill area of their choice. High school students get on the job experience in work study programs.

PROGRAM DESCRIPTION AND OBJECTIVES

I. Specific Objectives For The Teacher

A. To assist students in identifying a variety of jobs in the 15 occupational clusters (elementary school level).

B. To cause an awareness through a description of various occupations (elementary school level).

C. To teach and demonstrate the relationship between specific vocational activities and "real" occupations (junior high school level).

D. To increase knowledge and functional interrelationships between management, production and service areas of business and industry (junior high school level)

E. To foster positive attitudes toward self, others, and the world of work (senior high school level).

II. Specific Outcome Objectives For Students

A. Increased ability to identify and describe a variety of occupations in a broad array of occupational areas (elementary school level).

B. Increased knowledge of equipment used in various occupations and their utility (elementary school level).

C. Increased knowledge of the operations of a functional interrelationship between management, production and service areas of business and industry (junior high school level).

D. Increased ability to describe the relationship between specific vocational activities and "real" occupations (junior high school level).

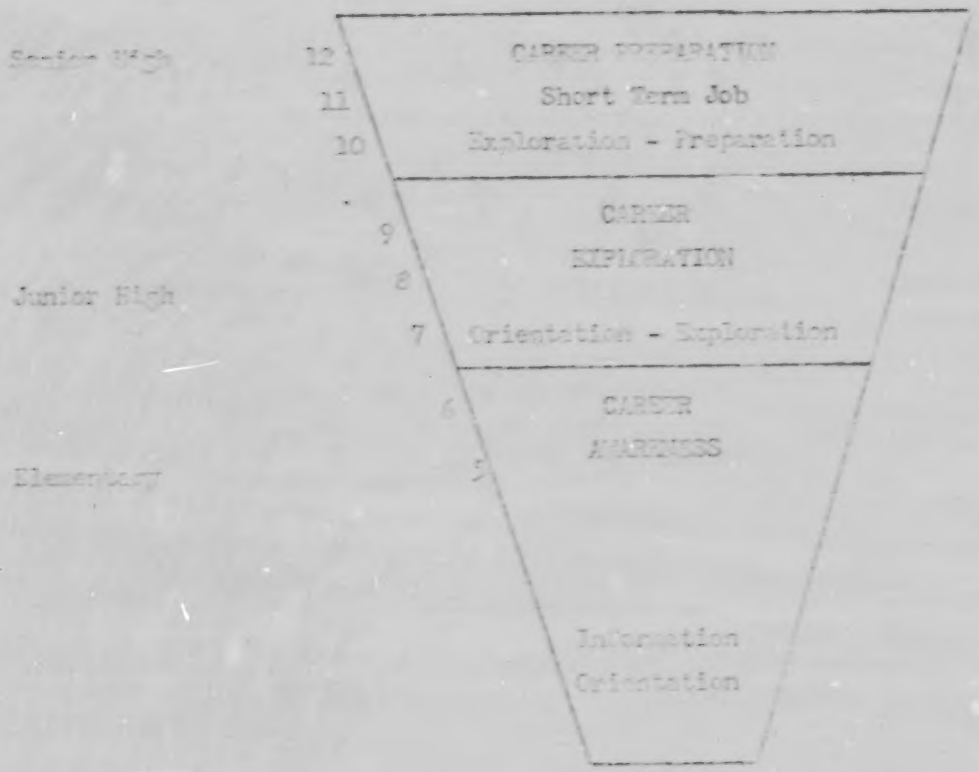
E. Increased positive attitudes toward vocational education (senior high school level).

INTRODUCTION

The Model Cities Developmental Vocational Education Program is directed toward serving the occupational needs and aspirations of those youths in the Cleveland Model Cities area. This vocational education project embraces four basic components:

1. An informational-orientation program at the elementary school.
2. An orientational-exploratory component at the junior high school level.
3. An exploratory-preparational phase at the senior high school level.
4. An extensive short term job program.

The figure below illustrates a clearer picture of the above mentioned components:



INSTRUCTIONS FOR USE OF THIS GUIDE

All units in this guide have been developed around the fifteen occupational clusters as have been identified by the United States Office of Education's Bureau of Adult, Vocational and Technical Education.

The Developmental Vocational Education Program has made a concentrated effort to assist Model Cities area disadvantaged and handicapped youth who have been turned off by education. Since it is probable that many of these inner city youth will never leave the city of Cleveland, it becomes necessary to make these individuals aware of the many career opportunities available in other areas in general and the City of Cleveland in particular.

The various materials in the elementary section of this guide are designed for injection in the various fifth and sixth grade social studies units presently used in the schools participating in this program. Obviously use of all of the occupational clusters is not possible in any one social studies unit, nor are all of the social studies units equally amenable to use of all of the clusters. Certain clusters complement and enhance certain units better than others.

In using this guide, the elementary social studies teacher will have to decide which cluster to use in any given unit on the basis of how well the cluster will integrate with said unit, and the interests and aptitudes of his/her students. The use of the guide necessitates the use of teacher creativity and discretion in its implementation.

The time alloted to cover a regular social studies unit varies from two to six weeks. In scheduling the time alloted for the "cluster" material, the teacher may find that a certain cluster can best be presented in one or two sessions; another cluster may be enhanced by injection bit by bit at various stages in the teacher's regular social studies schedule.

At the elementary level, the conceptual approach, followed by a list of specific behavioral objectives is used. To augment this, vocabulary lists, learning experiences, desired outcomes, and instructional and resource materials are listed. Preceding each unit is a brief general discussion related to the cluster under consideration. In most cases a pre-test and a post-test is used at some point during the presentation of each occupational cluster; however, teachers are encouraged to be creative and use their own initiative in developing varied means of generating interest and enthusiasm for the subject.

On the secondary level, each unit is preceded by a list of general objectives, followed by specific behavioral objectives. General discussions, information and study sheets, and in some cases pre tests and post tests are provided for the majority of the units in the secondary section. In many instances, answers are provided for pre tests and post-tests. On occasions where answers are not given, it is suggested that teachers refer to their basal and supplementary textbooks used in the classroom, and the array of occupational resources available in the school's career library and guidance office. At all levels, instructional and resource materials (films, slides, tapes, books, pamphlets, etc.) are indicated and available in either the school, the DVEP office, or the Audio-Visual Services office provided by the Cleveland Board of Education.

The teacher, vocational aide, or any other resource person is not expected to use all of the learning activities listed or to achieve all of the objectives and goals listed in any one setting; only those which are applicable and appropriate should be used for a particular class. However, the teacher is encouraged to use his/her own objectives if he/she feels the need to do so.

In summary, for each unit in this curriculum guide, an effort has been made to supply the teacher with as much information as possible, such as lists of films, tapes, and filmstrips, contact points for speakers and field trips etc.. Teachers are also encouraged to call upon the school guidance staff, the librarian, and any other qualified school and/or community resources who may be more effective in aiding the students in developing more positive attitudes toward self, others, school, and the world of work.

OUTLINE OF PROCEDURES

A. Elementary (Informational -- Orientation Component)

1. Involve or inject the 15 occupational clusters into fifth and sixth grade social studies.

2. Relate occupational areas to the subject matter.

3. Emphasize occupational areas rather than specific jobs.

4. Introduce future occupational areas.

5. Develop appropriate classroom activities:

   a. role playing
   b. simulated games
   c. time organization problems

6. Secure films, slides and other visual aids for reinforcement.

7. Secure speakers for informational purposes.

8. Organize field trips:

   a. local commercial and businesses
   b. junior high and senior high school vocational education facilities.

B. Junior High (Orientational -- Exploratory Component)

1. Inject the 15 occupational clusters into all junior high high classes.(all classes and subject areas are involved)

2. Relate the full range of occupational requirements, opportunities and advantages.

3. Establish a model industrial system:

   a. management
   b. production
      1. production line
   c. service components
      1. related concepts to actual operations
      2. managing the production
   d. business office
      1. planning the production
      2. managing the production
   e. each student to have equal time in every department

4. Arrange field trips to local business and industrial work sites.

    a. Time spent by students talking with employees in different areas:

        1. get a feel of actual duties performed
        2. working conditions
        3. wages
        4. job requirements
        5. advantages of the occupation

5. Encourage student reactions to the field trips.

    a. Individual counseling sessions

        1. discuss reactions to field trips
        2. discuss and relate roles students play in the model industrial system (Vocational course of study will be an elective at grades eight and nine).

    b. Self-evaluation

        1. analyzing own abilities
        2. aptitudes
        3. interests in future employment possibilities

6. Provide special instruction and experiences in narrower work areas.

    a. Build competence in a number of skill areas

        1. woodwork
        2. mechanical drawing
        3. printing
        4. metal shop
        5. typing
        6. home economics

7. Instruct and teach by direction.

    a. Junior high students instruct elementary school pupils

        1. tools
        2. machinery
        3. shops
        4. operations

8. Establish a career information center

    a. books
    b. pamphlets
    c. brochures
    d. films
    e. filmstrips

C. High School (Exploratory-Preparational Component)

1. Establish a Career Information Center

   a. information on job opportunities
   b. post graduate training program
   c. job requirements
   d. career planning

2. Counsel for career and occupational choices

   a. students analyze their interest
   b. aptitudes
   c. abilities
   d. discuss the next step in career development
   e. select a small area to work in for one year

      1. visit work sites

         a. observe operations involved in related occupations

         b. demonstration by tradesmen

3. Selection of one major occupational skill by student

   a. intensive training
   b. continue to make work- ite visits
   c. observe and talk to the advanced students in the program (work and study)

   d. enter work-study program (½ day school -- ½ day work)

      1. earn money
      2. put training to use in real work situation

4. Plan for post graduation

   a. finding a job

      1. employment office
      2. work orientation teacher
      3. high school vocational counselor
      4. newspapers

   b. furthering vocational training (Cleveland Board of Education)

      1. Max S. Hayes

         a. for males
         b. know specific industrial career he wants to train for

      2. Jane Addams High School

         a. for females
         b. know specific industrial career she wants to train for

3. Martin Luther King High School

   a. for males
   b. vocational training for interested and qualified students
   c. high school diploma
   d. academic instruction geared toward related occupational goals

OCCUPATIONAL CLUSTERS

1. Business and Office Occupations
2. Marketing and Distribution Occupations
3. Communications and Media Occupations
4. Construction Occupations
5. Manufacturing Occupations
6. Transportation Occupations
7. Agri-Business and Natural Resources Occupations
8. Marine Science Occupations
9. Environmental Control Occupations
10. Public Service Occupations
11. Health Occupations
12. Hospitality and Recreation Occupations
13. Personal Services Occupations
14. Consumer and Homemaking-Related Occupations
15. Fine Arts & Humanities

* The above clusters have been identified and codified by the United States Office of Education's Bureau of Adult, Vocational and Technical Education.

E L E M E N T A R Y

FIFTH AND SIXTH GRADE SOCIAL STUDIES

An attempt has been made to relate the fifteen occupational clusters devised by the United States Office of Education, to the following fifth and sixth grade units presently used in the Cleveland Public School System:

Grade 5

Unit II: How Africans and Europeans Settled the Coast Colonies
Unit III: A New America Grows Up
Unit IV: Lands and People of the Southern and North Central States
Unit VIII: Ohio
Unit IX: Land and People of the Western States

Grade 6

Unit III: How The Country Grew - A New America Grows Up
Unit IV: Citizens In A Changing America
Unit V: Canada, Our Neighbor to the North
Unit VII: Mexico, Gateway to Latin America
Unit VIII: Lands of The Carribean - Central America and the West Indies
Unit IX: South America
Unit X: The Americas In A Changing World

AGRI-BUSINESS & NATURAL RESOURCES--AGRICULTURE

General Discussion

The United States is in the middle of an agricultural revolution, that is having an effect on the employment outlook in agriculture. The reason is simply that each farmer today is able to produce far more than his predecessors. Management is the key to success in modern farming. Agriculture still offers challenging and rewarding careers with larger incomes and better living conditions than before. Although the number of opportunities in farming is shrinking, the number of jobs in farm related industries is not.

PRE-TEST

1. Name three types of farmers.
2. Extension service workers are engaged in educational work in agriculture, home economics, youth activities, and community resources development. (TRUE OR FALSE)
3. There are more farms in the United States today than ever before. (TRUE OR FALSE)
4. What is the job of the dairy farmer?
5. What is the job of the poultry farmer?
6. What types of animals are raised on a livestock farm?
7. What are some of the facilities that are available on a private outdoor recreational farm?
8. What are some of the duties of the corn and wheat farmers?
9. In what area is most of the cotton raised?
10. In what area is the most tobacco raised?

OCCUPATIONAL CLUSTER: Agri-Business & Natural Resources
JOB FAMILY: Agriculture

GRADE: 5 Social Studies
TITLE: Unit IV--Lands and People of The Southern and North Central States
BASIC CONCEPTS: (1) Agriculture has always been important to Ohio.

(2) Agriculture offers challenging and rewarding careers with larger incomes and better living conditions than before.

(3) Any career has levels of responsibility.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify and describe the duties of people working in the various agricultural areas mentioned in this unit.	Agri-Business dairy Extension Service-Worker Farmer (Poultry) Livestock farmer Outdoor recreation-farmer Natural Resource-consumer	Pre-Test The students will make a display of products produced on a farm. Students will make reports on items produced on a farm. Post Test (Same as Pre-test)	The students will have a more positive attitude toward self, others, and the world of work. The student will be more aware of jobs available in the area of agriculture.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: AGRI-BUSINESS AND NATURAL RESOURCES

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In These United States and Canada Boston: D.C. Heath and Company 1965	Films: "Our Natural Resources" "Conserving Our Natural Resources" "Exploring the Farmland"	Corn and Wheat farmers Dairy Farmers Live Stock Farmers Poultry Farmers Peanut Farmers	Contact: Consumers' League of Ohio 940 Engineers Bldg , Cleveland, Ohio 621-1175 Topic, "Agricultural Migrants"	Contact: City of Cleveland Greenhouse, Luther Karrer, 750 East 88th St. Cleveland Ohio C.R. Perkins and Sons 28359 Center Ridge Rd. Cleveland, Ohio	Pamphlets Brochures SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objective number (1) will be based on the ability of at least 80% of the students to orally identify and describe at least four out of six jobs listed in this unit. Student success on post test will be based on the ability of at least 80% of the students to achieve a 10% accuracy increase over their initial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

MINING

AGRI-BUSINESS & NATURAL RESOURCES

General Discussion

The mining industry is a major supplier of the basic raw materials and energy sources required for industrial and consumer use. Few of the products exacted from mines reach the consumer in their natural state. Nearly all require further processing in one or several of the manufacturing industries.

POST TEST (Mining)

Answer the following questions True or False.

1. Petroleum is one of the fossil fuels. (True)
2. Exploring for oil is the first step in petroleum production. (True)
3. The paleontologist study fossil remains in the earth to locate oil-bearing sands. (True)
4. Mineralogist study animals and how they evolve. (False)
5. Draftsmen assist in surveying and mapping operations. (True)
6. Biology is another way of searching for oil. (False)
7. The chief duty of the pumpers is to regulate the flow of oil. (True)
8. Treaters treat all the workers well. (False)
9. Natural gas as it flows from the ground is easy to transmit through pipelines for long distances. (False)
10. Drilling for oil and gas is done in about three fourths of the United States. (True)

OCCUPATIONAL CLUSTER: Agri-Business & Natural Resources
JOB FAMILY: Mining

GRADE: 5 Social Studies
TITLE: Unit IX--Lands and People of the Western States or unit VII Mexico City, Gateway to Latin America
BASIC CONCEPTS: (1) Industries flourishes when people with money, energy, ability, and creative ideas find an advantageous location with abundant natural resources.

(2) The mining industry is a major supplier of the basic raw materials and energy resources required for industrial and consumer use.

(3) Different occupations are interrelated in many ways.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to list at least 5 different jobs in the area of mining. The students will be able to describe and identify the jobs discussed in this unit.	Agri-Business Biology Conveyor Operator Crusher Operator Draftsmen Geologist Mineralogist Patoentologist Petroleum Pumpers Treater	Students will give reports on different types of mining. Students will bring in pictures and articles for a bulletin board. General class discussion on various products produced in mines. Students will orally discuss or list safety precautions used to prevent mine disasters Post Test	The students will be more aware of jobs existing in the city of Cleveland in the area of Agri-Business and natural resources. The students will have a more positive attitude toward self, others and the world of work. The students will be more aware of the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: AGRI-BUSINESS & NATURAL RESOURCES- MINING

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C Tottie, John In These United States and Canada Boston; D.C. Heath & Company 1965	Films: "Silver" - A film on mining "Copper" - A film on mining	Conveyor Operator Crusher Operator Cutting Machine operator Drill Operators Geologist Mechanic Repairmen Technician Tractor Driver Truck Driver	Contact: Morton Salt Co. Euclid Building 241-7232	Contact: Morton Salt Company Euclid Building 241-7282	Pamphlets Brochures SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objectives (1) and (2) will be based on the ability of at least 80% of the students to orally describe 75% of the jobs discussed in this unit. The attainment of post test objectives will be based on the ability of at least 80% of the students to achieve a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

AGRI-BUSINESS AND NATURAL RESOURCES

NATURAL GAS AND PETROLEUM

General Discussion

Petroleum refining changes crude oil into gasoline, kerosene, fuel oil lubricants, and other products for use in homes and industry. The modern refinery is a complicated structure made up of tanks and towers connected by a maze of pipes. About one-third of the plant workers in refineries are employed in processing work.

The petroleum and gas industry employs a large spectrum of workers from the very highly trained professional to the unskilled. Each of these employees is necessary to find the petroleum, refine the crude oil into gasoline, kerosene, fuel oil, oil lubricants and other products for home and industry.

Exploring for petroleum involves the petroleum geologist to study the earth's crust and seek a site most likely to yield oil. Once a site has been selected, a shothole driller and his helper may use a portable rig to make holes in the earth's surface. The holes are then filled with explosive under the shooter's supervision. If oil is there, a permanent rig is installed by the rig builder and the derrickman helps supervise the oil drilling.

The crude oil is piped to refineries. The refineries are complicated structures made up of tanks, towers and pipes. Once in the refinery the crude oil flow of production is almost continuous. About one third of the plant workers in refineries are employed in processing work. Others are involved in maintenance, electrical work, and maintenance.

PRE-TEST(Natural Gas and Petroleum)

1. Is the United States the leader in petroleum marketed by the gasoline service station? _____

2. List two or more jobs in the petroleum field. _____

3. What is a roustabout? _____

4. What is the fruit of the petroleum industry? _____

5. What does a chemist in the petroleum field do? _____

6. What is a land man? _____

7. What is the Pumper's job? _____

8. What are some different types of petroleum products? _____

_____

9. What is the refinery? _____

10. What is a pipeliner's job? _____

OCCUPATIONAL CLUSTER: Agri-Business and NATURAL RESOURCES
JOB FAMILY: NATURAL GAS AND PETROLEUM

GRADE: 6 Social Studies
TITLE: Unit VII--Mexico, Gateway to Latin America or Unit IX--South America
BASIC CONCEPTS: (1) Individuals differ in abilities, interest, attitudes, and values.

(2) Geographical location determines kinds of work therein.

(3) There are job opportunities for a wide range of abilities, men and women, young and mature, in agri-business and natural resources work.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe various jobs in the gas and petroleum industry. The students will be able to write or orally give general definitions for terms used in the unit.	Agri-business Derrickmen Driller Land man Observer Petroleum Petroleum geologist Pipe liner Prospector Roughneck Rousabout Scout Shooter Stillman Tool pusher	Pre test Reports by students on various jobs in the petroleum industry. Make a collage or bulletin board of people working in specific fields in the petroleum industry. Post test, (same as pre-test)	The students will have a positive attitude toward the world of work and preparation for work. The students will have a general knowledge of the meaning of the term agri-business.

ACRI-BUSINESS AND NATURAL RESOURCES

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: NATURAL GAS AND PETROLEUM

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY EVRB OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C Tottle, John In These United States and Canada Boston: D.C. Heath and Company, 1965	"Earth Resources in its Crust."	Chemists Derrickmen Draftsmen Drillers Firemen Observer Petroleum-geologist Prospector Rig Builders Rodmen Roughnecks Roustabout Scout Shooters Tool pusher	Contact: East Ohio Gas Company Sohio's Speakers Bureau (Petroleum) 1701 Midland Bldg. Cleveland, Ohio 575-3549	Contact: East Ohio Gas Company Public Relations Dept. 522-2929	Pamphlets Brochures SRA Kits Popeye Career-Comics

EVALUATION: The attainment of objective (1) will be based on the students' ability to orally identify and describe at least 10 jobs in the Natural Gas and Petroleum job family. Eighty percent of the students in the sixth grade social studies will be able to orally define 85% of the vocabulary terms used in this unit. The attainment of post test objectives will be based on the ability of at least 80% of the students to achieve a 10% accuracy increase over their initial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

HORTICULTURE

AGRI-BUSINESS AND NATURAL RESOURCES

General Discussion.

Horticulture is the science of cultivating plants. Horticulture is one of the principle branches of agriculture. This vast field deals with the cultivation and utilization of fruits, flowers and ornamental plants. Today horticulture offers young people as many interesting and exciting careers as the space industry. Horticulture is a science, an art, a business and a profession.

[illegible]

1. What are some of the tools used in horticulture?
2. What does the word horticulture mean?
3. What plants or vegetables have you grown at home?
4. What is a greenhouse?
5. What grows inside a greenhouse?
6. Name four kinds of plants studied in horticulture.
7. Is horticulture a part of agriculture?
8. Is horticulture a science?
9. A greenhouse is always green. (TRUE OR FALSE)
10. Describe a home garden you have had, if any.

OCCUPATIONAL CLUSTER: Agri-Business and Natural Resources
JOB FAMILY: Horticulture

GRADE: 5 Social Studies
TITLE: Unit IV--Lands and People of the Southern and North Central States
BASIC CONCEPTS: (1) Every individual can have a meaningful, rewarding career.

(2) Information and exploration of jobs are essential to wise career decisions.

(3) Every career requires some special preparation.

(4) Every occupation contributes to society.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe the function of various tools used in horticulture. The student will be able to describe in simple terms various careers associated with Horticulture. The student will be able to state general definitions for the vocabulary terms.	Agri-business Agricultural economist Agricultural engineer Biophysicist Floral Designer Geneticist Greenhouse Horticulture Plant propagator Soil scientist	Pre-Test Students will prepare book reports on jobs in Horticulture. Students will prepare a school garden. Students will make a Bulletin board dealing with jobs in Horticulture Post Test(same as pre test)	The student will appreciate the many different uses of plants (comfort beauty, food, etc). The student will be more aware of the World of work. The students will be more knowledgeable about Horticulture jobs and centers located in the city of Cleveland.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: AGRI-BUSINESS AND NATURAL RESOURCES

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In These United States and Canada. Boston: D.C. Heath and Company 1965	"Garden Plants and How They Grow" "Insects In A Garden" "Our National Resources" "Desert Farming" "Man Uses and Changes the Land"	Agricultural-economist Biophysicist Ecologist Floral designer Geneticist Horticulturist Plant propagator Soil Scientist	Contact: Sunnybrook Farms 9446 Mayfield Rd. Cleveland, Ohio Ohio Agriculture Research and Development Center	Contact: A.C. Heinrick's Greenhouse, 211 East Schaaf Rd., Cleveland, Ohio Cleveland Cultural Gardens-Rockefeller Park Gastemine Farms 9809 Washington St. Chagrin Falls, Ohio Cleveland Fine Arts Gardens, 11150 East Blvd., Cleveland, Ohio	Books Pamphlets Brochures SRA Kits Popeye Career-Comics

EVALUATION: Successful attainment of objectives (1), (2), and (3) will be based on: (a) the ability of 85-90% of the students to orally define eight of the 11 terms discussed in this unit, (b) the ability of 85-90% of the students to orally describe 75% of the careers discussed in this unit. (c) the ability of all students to visually identify three out of five tools used by a horticulturist and/or a gardner. Student success in this unit will be based on at least 75% of the students achieving a 10% accuracy increase over his initial scores on the pretest.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

BUSINESS AND OFFICE OCCUPATIONS

General Discussion

In every industry you can imagine, there are certain people that the company cannot do without. This is the group of people who perform the business and clerical tasks. The group is made up of millions and millions of people who keep businesses running smoothly by keeping correct, up-to-date records. The skills of these persons are often important factors in a business' success or failure. Some titles included in this category are accountants, cashiers, typists, secretaries and personnel workers.

PRE-TEST

I. Multiple Choice

1. This person gives and receives information to people who call.
   (a) accountant (b) cashier (c) receptionist

2. This worker keeps track of goods being transferred from one place to another.
   (a) shipping & receiving clerk (b) wholesaler (c) distributor

3. This person keeps records.
   (a) clerk (b) accountant (c) secretary

4. Company products are displayed through them.
   (a) advertising workers (b) personnel workers (c) distributor

5. You may be hired by this person.
   (a) public relations (b) personnel worker (c) marketing worker

II. True or False

1. A secretary does not answer phones._____

2. An office machine operator works on one machine only._____

3. Marketing research workers are fact-finders._____

4. Personnel workers interview people for jobs._____

5. Advertising workers try to persuade the public to buy a product._____

KEY

I	II
1. c	1. F
2. a	2. F
3. b	3. T
4. a	4. T
5. b	5. T

OCCUPATIONAL CLUSTER: Business & Office Occupations
JOB FAMILY:

GRADE: 5 Social Studies
TITLE: Unit VIII - Ohio
BASIC CONCEPTS:

(1) The skills of persons working in business and office occupations are often important factors in the business' success or failure.

(2) A worker must understand, not only his job, but also his employer's rules, regulations, policies and procedures.

(3) Every career requires some preparation.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe the duties of various people performing business and office duties. The student will be able to identify some of the machines and materials used by individuals working in an office (typewriter, adding machine, etc.).	Accountant Advertising Worker Cashier Distributor Marketing Research Worker Office Machine Operator Personnel Worker Public Relations Worker Receptionist Secretary Stenographer Typist Wholesaler	Pre-test Set up a present day office situation, include the employer, secretary, etc. A short skit will show how a typical day proceeds in an office. Students will use a toy telephone to role-play or practice the duties of a receptionist. Post test (same as pre-test)	The students will be more aware of specific jobs in the area of Business and Office Occupations. The students will have a more positive attitude toward self, others and the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE OCCUPATIONS

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY OWN OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. & Tottle, John. In These United States and Canada Boston: D.C. Heath & Co. 1965	Films: "Your Career As A Secretary" "Careers--Clerical"	Accountant Cashier Office Machine Operator Personnel Staff Secretary Stenographer	Contact: Addressograph Multigraph Co., 731-8000 Ext. 291 Cleveland Advertising Club, Statler Hotel Contact Terry Befer 241-4807	Contact: S.W. Addressograph-Multigraph, 1200 Babbett Road, Euclid, Ohio 44117 Office Service Manager, Eaton Corp. 100 Erieview Plaza Cleveland, Ohio 44115, 523-5256	Pamphlets Flyers SRA Kits (hands on packs in Job Experience Kits) Popeye Career Comics

EVALUATION: Successful attainment of objectives one and two will be based on: (1) the ability of at least 80% of the students to orally identify and describe nine out of thirteen Business and Office jobs, and (2) the ability of at least 80% of the students to orally identify seven out of ten pieces of office equipment used in Business and Office careers.
Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

BANKING

General Discussion

Banks have been described as "department stores of finance" because of the variety of financial services that they offer. Their services range from convenient individual checking accounts to letters of credit that may be used to finance world trade.

PRE-TEST

Match the lettered definition to the matching terms.

_____1. Proof Machine Operator

_____2. Tellers

_____3. Sorter

_____4. Bookkeeping Machine Operator

_____5. Transit Clerk

_____6. Bookkeeping clerk

_____7. Trust Investment Clerk

_____8. Reconcilement clerk

_____9. Exchange Clerk

_____10. Interest Clerk

A. Routine typing, calculating, and posting related to bank transactions

B. Separate bank documents, checks deposit slips, and other bank items

C. Cashes customer's checks and handles deposits and withdrawals from checking and saving accounts

BANKING

PRE-TEST

D. Sort bank items such as checks and drafts of other banks, list and total the amounts involved, and prepare the documents so that they can be mailed for collection

E. Use equipment, sort items, and adds, and records the amounts of money involved

F. Process statement from other banks to expediate the auditing of accounts

G. Post the daily investment transactions of bank customers

H. Maintain records relating to interest-bearing items which are due or payed

I. Serve foriegn deposit accounts and determine charges for cashing or handling checks drawn against such accounts

J. Type legal papers affecting titles to real estate upon which money has been loaned, and maintain records relating to taxes and insurance on such properties

K. Processes mail which comes in daily to a city bank and determines which items must be held at the main office and which should be routed to branch banks or out-of-town banks for collection

L. Uses conventional bookkeeping machines or electronic posting machine especially designed for bank work

OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE OCCUPATIONS
JOB FAMILY: BANKING

GRADE: 5 Social Studies
TITLE: Unit VIII--Ohio
BASIC CONCEPTS:
(1) Money is the chief form of barter in our society.

(2) There are many jobs associated with banking.

(3) Careers require different knowledge, abilities, attitudes.

(4) Careers can be grouped in various ways into "families" requiring similar abilities and providing similar rewards.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify and describe duties of individuals performing various duties in a bank.	Bank Barter Bookkeeping Machine Operator Exchange Clerk Interest Clerk Reconcilement Clerk Sorter Teller Transit Clerk Trust Investment Clerk	Pre-Test Each student will write a report on a job they would like to have in a bank. Students will role play people who are opening and using new savings and checking accounts. Students will set up a bank in the classroom. Use fake money, passbooks, and cards. Post-Test (same as Pre-Test)	The student will be more aware of various jobs in the area of Banking. The student will demonstrate a more positive attitude toward self, others, and the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE OCCUPATIONS

TEXT	FILMS AND FILMSTRIPS	RECORD SLIDES DEVELOPED BY TEACHER OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In These United States and Canada Boston, D.C. Heath and Company 1965	Films: "Banks and Credit" "How To Use Your Bank"	Bookkeeping Exchange Clerk Interest Clerk Machine operator Mortgage Clerk Proof Machine operator Reconcilement clerk Sorter Transit Clerk Trust Investment Clerk	Contact: Mr. Burt Gardner, Cleveland Trust Bank--East 9th and Euclid Ave. Cleveland, Ohio Miss Rae Cronker, American Institute of Banking, 420 Williamson Bldg., Cleveland, Ohio	Contact: Cleveland Trust Bank East 9th and Euclid Ave., Cleveland, Ohio	Pamphlets Brochures SRA Kits Popeye Career-Comics

EVALUATION: Successful attainment of objective number (1) will be based on the ability of at least 80% of the students to orally identify and describe seven out of ten jobs performed in a bank. Student success on the post test will be based on the ability of 80% of the students to achieve a 70% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

COMMUNICATION - TELEVISION

General Information

Television is one phase of communication. In fact, it is one of the most wide spread phases of communication. It is very educational and it teaches much about world wide affairs. Televised are all sorts of programs which are all helpful to one person or another. There are various positions available in television and they are good positions. Many employees work behind the scene and are seldom seen by the public, some are never seen. But we know that if not for those people we wouldn't have a good program. Their work affects our daily lives.

PRE-TEST

DIRECTIONS--Answer each question in a complete sentence.

1. Name ten different types of jobs in television.
2. Why does scenery have to be built for television?
3. What is the name of the device the control room staff uses to observe floor activities.
4. What is the cost of a color television tube?
5. What is the cost of a black and white television tube?
6. What is a control room?
7. What is the job of the Floor Manager?
8. The cards that the cameramen use to tell the actors what to do are called?
9. What are the uses of television in which we studied about.
10. Write a short paragraph on what you learned about television.

OCCUPATIONAL CLUSTER: Communication and Media-Occupations
JOB FAMILY: Television

GRADE: 6 Social Studies
TITLE: The Americans In a Changing World
BASIC CONCEPTS: (1) Every occupation contributes to society

(2) People must accept as the World Changes

(3) Changes and Conditions in the World affect career opportunities

(4) Television, one of the most powerful forms of mass communication, has an enormous influence upon the opinions, habits and morality of individuals.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify different kinds of work people in the television industry do and some contributions each one makes to the community. The student will be able to describe the jobs of various people working in a TV Station. All students will be able to correctly answer at least 75% of the pre-test items	Communication Field Technician News Writer Program Director Television announcer Traffic Manager Video Technician	Pre-test Students will make bulletin boards dealing with television careers Role-playing of different TV jobs Oral discussion of items on study sheet Post test(same as Pre-test)	The students will be more aware of the different knowledge abilities and attitude required in the world of work. The students will be more aware of the influence TV has on the employee.

INSTRUCTIONAL AND RESOURCE MATERIALS OCCUPATIONAL CLUSTER: COMMUNICATION AND MEDIA

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY [illegible] OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In these United States and Canada Boston: D.C. Heath and Company 1965	Films: "Television Serves It's Community" "Television Is What You Make It" "Communication and our Town"	Announcer Director (TV) Field Technician Make-up Artist News Director News Writer Program Director Traffic Manager	Contact: WVIZ TV, Channel 25, Cleveland, Ohio	WVIZ TV Station Channel 25 (3500 Brookpark Rd. Cleveland, Ohio 398-2800 Ex-143	Pamphlets Posters SRA Kits Popeye career Comics People and Choices Career Folios

EVALUATION: Eighty percent of the students in sixth grade social studies upon completion of the study of this unit on television careers will be able to orally describe or identify at least 75% of the jobs discussed in this unit. Student success in this unit will be based on at least 75% of the students achieving a 10% accuracy increase over his initial scores on the pre-test.

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

STUDY SHEET FOR COMMUNICATIONS

1. The first English daily newspaper did not appear until 1702.

2. In 1690 Benjamin Harris published PUBLICK OCCURRENCES BOTH FORIEGN AND DOMESTICK.

3. Not until 1704 when John Campbell published the Boston News-Letter was a colonial newspaper published regularly.

4. Freedom of the press in the United States is one of the rights guaranteed by the first Amendment to the Constitution.

5. A newspaper is a publication usually issued daily or weekly to report current events through news stories, photographs, and illustrations.

6. Some of the different types of news found in most daily papers are:
   a. general interests and sports
   b. business and social
   c. news of death or prominent people
   d. editorial and entertainment
   e. advice columns
   f. weather reports

7. Some qualifications for obtaining an editorial position are:
   a. Preferably a college graduate, with a study of English, History, and Sociology, Political Science, Economics, and Psychology
   b. A writing ability
   c. A knowledge of grammar and spelling

8. The salary of the editor depends on the type and size of the publication. Editors of a large publication may receive from $800 to $1,000 a month. While editors of small publications may receive from $400 to $800 a month.

9. The Managing editor is the head of the news staff. He is responsible for the work of writers and editors under his supervision, as well as coordinating this work with that of the artists, typesetters, and advertising men. He works with all these people to decide what will go in the paper.

10. The City Editor is a man in charge of the news happening in the town.

11. The Copy Editor is a man that checks for mistakes in grammar or spelling. They also read advertising and everything else that is printed in the paper.

12. The Make-up Editor arranges things exactly as they will go on the pages of the paper.

13. The exact arrangement of all the copy as it will appear in the paper is called a lay-out.

14. The reporter (newsman) job is to gather information of current events and write stories on many subjects for publication in daily or weekly newspapers.

15. In gathering information, the reporter may interview people, review public records, attend news happenings, and do research.

16. Some requirements for becoming a reporter includes a college education, preferably degrees in journalism or liberal arts. Some feature writing courses require reading and conversational ability in a foreign language.

6. The Newspaper pressman in charge salary usually starts at $4.19 per hour. The Journeyman newspaper pressman salary is usually $3.86 per hour.

7. Some of the benefits of the newspaper occupations include a Union, pension plan, part payment of hospitalization, protected long service with job security, granted sick leave, and two weeks vacation for employees with one year or more seniority. Three weeks for three years or more seniority.

COMMUNICATION - NEWSPAPER

PRE-TEST

1. What is a newspaper?
2. Name some of the different jobs of a newspaper?
3. Why do we have newspapers?
4. Is a newspaper a form of transportation, public service or communication?
5. Have you ever been to a newspaper company?
6. What are the different types of news found in the daily newspaper?
7. When did the first newspaper appear?
8. What is the job of the editor?
9. What are the benefits of newspaper occupations?
10. Name three newspapers in our city.

OCCUPATIONAL CLUSTER: Communications and Media-Occupations
JOB FAMILY: Newspaper

GRADE: 5 Social Studies
TITLE: Unit II--How Africans and Europeans Settled the Coast Colonies
BASIC CONCEPTS: (1) Europe and the Western Hemisphere were both changed by exploration and settlement in new lands. Man and land affected each other. Adjustments to change were necessary and resulted in the growth of new ideas and new occupations.

(2) The Cleveland Press and the Cleveland Plain Dealer subscribe to every major news feature and picture service in America.

(3) The United States has the largest system of mass communications in the world.

(4) Every individual can have a meaningful, rewarding career.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe the duties of individuals working for a newspaper. The students will be able to list some of the contributions different people working in the newspaper industry take to the community.	Cartoonist Communication Copy Writer Editor(Managing, sports assistant) Newsman (Reporter Photoengraver Photographer Printing Pressman	Pre-test Create bulletin board on various positions in newspaper industry. Students will create and print their own newspaper and role-play the parts of various employees. Post test (same as Pre-test)	The students will be more aware of Cleveland's newspaper and the many jobs that are provided in the community. The student will have some appreciation for the impact the newspaper industry has in providing jobs for members of our community.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: COMMUNICATIONS AND MEDIA OCCUPATIONS

TEXT	FILMS AND FILM-STRIPS	SOUND SLIDES DEVELOPED BY OWN OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text; Preston, Ralph C. Tuttle, John In These United States and Canada Boston: D.C. Heath and Company 1965	Films: "The Newspaper" "Newspaper Serves Its Community"	Artist Assistant Editor Cartoonist Copy writer Delivery Man Managing Editor Printing Press-man Reporter Salesman Sports Editor	Contact: Speakers Bureau of the Plain Dealer or-- The Cleveland Call and Post	Contact: The Cleveland Call and Post--Cleveland's Black owned and operated newspaper. East 105 and Chester, Cleveland, Ohio The Plain Dealer 18th and Superior Ave. Cleveland, Ohio	Brochures Pamphlets SRA Kits Popeye Career Comics (communications)

EVALUATION: Successful attainment of objectives number (1) and (2) will be based on, (a) the ability of 80% of the students to orally identify and describe seven out of ten newspaper jobs and (b) the ability of all students to write or orally cite at least three contributions people working in the newspaper industry make to their community. Student success on the post test will be based on the ability of 80% of the students to achieve a 10% accuracy increase over their inital scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

COMMUNICATIONS - RADIO

General Information.

Radio broadcasting is one means of sharing information in the United States. We have the largest system of mass communication in the world. The United States has more than half the world's radio and television sets.

Disc Jockey - To succeed as a disc jockey one must have a pleasant and well-controlled voice, a good sense of timing and excellent pronunciation. He is responsible to the program director, is responsible for presenting a good station image while on the air and outside engagements.

Radio Announcer - An announcer must have a pleasant and well-controlled voice, a good sense of timing and excellent pronunciation. He must also be a convincing salesman when presenting commercials.

Music Director - Responsible for music co-ordination for overall policy in connection with record distributors and promotion.

Broadcast Technician - Broadcast technician sets up and maintains the electronic equipment used to record radio programs.

COMMUNICATIONS - RADIO

PRE-TEST

1. What is a Radio Announcer?
2. What do you think would make a person a good Disc Jockey?
3. What are the most important duties of a Disc Jockey?
4. What would be the duties of the Music Director?
5. What is a Broadcasting Technician?
6. Who pays for the radio programs you hear?
7. List some of the other uses of radio besides in your home.
8. Why do you think Advertisers choose to place their products on programs that are popular?
9. What is a Commercial?
10. Would you rather listen to radio or look at television? Why?

OCCUPATIONAL CLUSTER: Communication and Media-Occupation
JOB FAMILY: Radio

GRADE: 6 Social Studies
TITLE: Unit VII-Mexico, Gateway to Latin America
BASIC CONCEPTS:

Communication Systems (Radio, TV, Newspaper) tie a community together, and link it to the rest of the world.

A lack of communication affects every day life and the growth of industry and trade.

Most jobs require certain personal qualities as well as skills.

A country's economy, location, government and laws affect career opportunities.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify pictures and slides of people working in the Radio field. In a general sense, the student will be able to demonstrate their knowledge by successfully completing cross-word puzzles with careers in Radio.	Broadcast Technician Consultant Disc Jockey Music Director Program Director Public Relations Radio Announcer Radio Station Manager	Pre-test Student will role play a disc jockey--they will play records and give a complete broadcast program with news, records and commercials. Cross-word puzzles Career Games-communication Oral discussion Post test (same as pre test)	The student will be more aware of the world of work. The student will exhibit verbally, in writing or role-play his knowledge of various careers in Radio communication.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: COMMUNICATION AND MEDIA OCCUPATION-Radio

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY OWEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John To Those United States and Canada Boston: D.C. Heath & Co. 1965	Films: "Communications and the Community" Filmstrips: "Radio"	Broadcast Technician Chief Engineer Consultant Disc Jockey Music Director Program Manager Public Relations Station Manager	Contact: WBOE Radio Station Cleveland Board of Education or WJMC fm Radio Station Cleveland, Ohio	Contact: WBOE FM Radio Station (Cleveland Board of Education E. 6th St.) WHK AM Radio Station Cleveland, Ohio Note: Call public relations department.	Pamphlets Posters SRA Kits Popeye Career-Comics

EVALUATION: Attainment of objectives one and two will be based on: (a) the ability of all students to identify pictures and slides of seven out of ten people working in various radio careers, and (b) the ability of all students to successfully complete a cross-word puzzle on radio careers with a minimum of five errors on the puzzle. Student success on the post test will be based on as least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

CONSTRUCTION

General Description

The activities of the construction industry touch nearly every aspect of our daily lives. The houses and apartments we live in, the factories, offices and schools in which we work, and the roads we travel upon are examples of some of the products of this important industry. The business encompasses not only new construction projects but also includes additions, alterations, and repairs to existing structures.

The contract construction industry is divided into three major segments. About half of the work force is employed by electrical, air conditioning, plumbing, and other special trade contractors. Almost one-third work in the general building sector where most residential, commercial, and industrial construction occurs. The remaining one-fifth are engaged in building dams, bridges, roads, and similar heavy construction projects.

CONSTRUCTION

PRE-TEST

True or False

_____1. A man who fixes sinks and faucets is an ironworker.

_____2. A painter's main tools are a hammer and nails.

_____3. A sheet metal worker uses wood.

_____4. Plumbers fix all broken windows.

Match the definitions to the correct word.

_____5. A man who paints your house

_____6. A person who puts a top on a building

_____7. A person who makes things of wood

_____8. A person who lays bricks

A. Bricklayer
B. Roofer
C. Painter
D. Carpenter

Fill in these spaces with the correct word.

_____9. Father called a _____to fix the sink.

_____10. A _____came and made some new steps for the porch.

KEY

True or False	Matching	Fill-in
1. F	5. C	9. Plumber
2. F	6. B	10. Carpenter
3. F	7. D	
4. F	8. A	

OCCUPATIONAL CLUSTER: Construction
JOB FAMILY:

GRADE: 5 Social Studies
TITLE: Unit IX - Lands and People of the Western States
BASIC CONCEPTS:

(1) Occupations in the Western States are frequently influenced by the geographic and climatic conditions of the region.

(2) Careers require different knowledge, abilities and attitudes.

(3) The city of Cleveland will continue to provide jobs for people who are skilled in various types of construction.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to describe and identify various jobs in the Construction Field. The student will be able to identify some of the basic tools used in the construction field.	Bricklayer Carpenter Construction Electrician Painter Plasterer Plumber Roofer Sheet metal worker Teamster	Pre-test Students will make bulletin boards depicting the various types of construction. Students will work with simple tools used in the construction industry. Post test (same as pre-test)	The student will have a more positive attitude toward self, others and the world of work. The student will be aware of the fact that most jobs require certain personal qualities as well as skills

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: CONSTRUCTION

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John. In These United States and Canada Boston: D.C. Heath & Co. 1965	Films: "Building Trade" "The House Builder" "Careers in the Building Trades" "Building a House"	Bricklayer Carpenter Electricians Painter Plasterer Plumber Teamster	Contact: Bureau of Apprenticeship Training, New Federal Bldg. Room 837, 522-3823	Contact: The field trips are planned in the Model Cities area as they they are requested by the vocational aids and teachers.	Pamphlets Posters SRA Kits

EVALUATION: Successful attainment of objective one will be based on the ability of all students to orally identify and describe at least seven out of ten different Construction jobs. Objective number two will be realized through the ability of all students to orally identify at least seven out of ten tools used in various construction jobs. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

CONSUMER AND HOMEMAKING

GENERAL DISCUSSION

Consumer and homemaking occupations deal directly with the well being of the home. These occupations may go on inside the home as well as outside. In today's market for jobs, the service industries represent an important source of employment to new, as well as experienced workers. These industries offer opportunities to those with varying degrees of education and training, and various levels of skills. Hotels and motels provide travelers with a home-away-from-home. More than 750,000 people worked in these hotels, motels, and other related businesses in 1968.

PRE-TEST

1. What is a Consumer?
2. What is a Homemaker?
3. What are vitamins?
4. How often should you take vitamins?
5. Do cooks only prepare foods?
6. Why do some people make their clothes?
7. Will you need a good credit record for purchasing goods and products?
8. Is there such a thing as "Safety in the Home"?
9. What is meant by adolescence?
10. What is meant by nutrition?

OCCUPATIONAL CLUSTER: Consumer and Homemaking Related Occupations

JOB FAMILY:

GRADE: 5 Social Studies
TITLE: Unit VIII - Ohio
BASIC CONCEPTS:

(1) Every occupation contributes to society.

(2) Every induvidual can have a meaningful, rewarding career.

(3) Careers require different knowledge, abilities and attitudes.

(4) Consumer and Homemaking occupations deal directly with the well being of the home.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to describe and identify the jobs and duties of individuals working at specific jobs listed in this unit.	Adolescence Butler Career Caretaker Chauffeur Consumer Home Economist Job Nursemaid Nutrition Occupation Vitamins	Pre-test Oral discussion of consumer and homemaking occupations Students will speak to their parents, and people in the community who have jobs in the area of homemaking and related occupations. Students will set up home situations, set up budget for running home etc. Post test (same as pre-test)	The students will have a more positive attitude about homemaking related jobs. The student will be more aware of the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS

OCCUPATIONAL CLUSTER: CONSUMER AND HOMEMAKING RELATED OCCUPATIONS

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tuttle, John. In These United States and Canada. Boston: D.C. Heath & Co. 1965	Film: "Health Careers"	Butler Caretaker Chauffeur Housekeeper Home Economist Nursemaid	Contact: Consumer's League of Ohio Engineer's Building 44114, 521-1175 Consumer Protection Association 118 St. Clair Avenue Cleveland, Ohio 44114 241-0185 Central National Bank of Cleveland P.O. Box 6179 Cleveland, Ohio 44101 Credit Bureau of Cleveland Inc., 666 Euclid Ave., Cleveland, Ohio	Contact: Jane Addams Vocational School, East 30th and Community College Dr., Cleveland, Ohio Emmanuel Baptist Church Nursing Home Contact: Rev. Glover	Pamphlets Leaflets Brochures SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objective number one will be based on the ability of at least 80% of the students to orally identify and describe 75% of the jobs listed in this Unit.
Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

ENVIRONMENTAL CONTROL

General Discussion

The environmental sciences are concerned with the history, composition, and characteristics of the earth's land, water, interior, atmosphere, and space. Many scientists in this field explore for new sources of mineral fuels and ores, while some perform basic research to increase scientific knowledge. Still others use the science we know of to solve practical problems, such as the meteorologist, who uses his scientific know-how to forecast the weather. Some of these scientists teach in colleges and universities. They also may administer scientific programs and operations.

ENVIRONMENTAL CONTROL

PRE-TEST

Match letter to number

A. Climatologist

B. Meteorologist

C. Oceanographer

D. Geologist

E. Petroleum Geologist

F. Geodesist

1. Studies the structure, composition and history of the earth's crust.____

2. Studies involve the ocean.____

3. Weather satellite is of value to him.____

4. Specializes in the discovery and recovery of oil and natural gas.____

5. Measures the size and shape of the earth.____

6. Analyzes past records on wind rainfall, sunshine, temperature and other weather data.____

Answer the following True or False

7. Weather forecasts are always correct.____

8. Geologists never work inside.____

9. The ocean covers more than two-thirds of the earth's surface.____

10. Oceanographers have to be fishermen.____

OCCUPATIONAL CLUSTER: Environmental Control
JOB FAMILY:

GRADE: 6 Social Studies
TITLE: Unit V--Canada, Our Neighbors to the North
BASIC CONCEPTS: (1) Work is man's way of creating, preserving, changing, and for rebuilding his environment.

(2) Different occupations are interrelated in many ways.

(3) Every career requires some special preparation.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe jobs in the environmental control field.	Climatologist Environment Geodesist Geologist Meteorologist Oceanographer Petroleum Geologist Weather Satellite	Pre-Test Open discussion on subject area. Assign TV observation of weather forecasting--compare forecast with actual weather conditions. Role-play situation dealing with pollution control. Students will collect current magazine and newspaper articles on the environment and pollution. These articles will be discussed in class. Students will prepare bulletin board. Post test (same as pre test	The student will be more aware of jobs in the area of environmental control. The student will demonstrate a more positive attitude towards the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: ENVIRONMENTAL CONTROL OCCUPATION

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY OVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In These United States and Canada Boston, D.C. Heath and Company 1965	Films: "Science and Technology" "Scientists at Work" "Erosion" "Earth Changes in its Surface" "Face of the Earth" Filmstrip, "Conservation"	Geologist Geophysicist Meteorologist Oceanographer	Contact: Republic Steel Corp. P.O. Box 6778 Cleveland, Ohio 44101 Cleveland Speaker's Bureau 574-4194	Contact: Castemine Farm 9809 Washington St Chagrin Falls, Ohio 543-9477 Cleveland Metropolitan PK Dist., Trailside Museums North Chagrin, Ohio, 442-2848	Brochures Pamphlets Newspaper and Magazine Articles

EVALUATION: Successful attainment of objective number (1) will be based on the ability of at least 80% of the students to orally identify and describe at least five different environmental control careers. Student success on the post test will be based on the ability of 80% of the students to achieve a 10% accuracy increase over their intial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

FINE ARTS AND HUMANITIES

PRE-TEST

Matching

1. I'll make a character come to life for you on television or in motion pictures.
2. I'll entertain you with my voice.
3. I'll teach you how to entertain with your voice.
4. I create the artwork you see on billboard poster, commercials, and magazine advertisements.
5. I'll use my artistic talent to improve the appearance and functional design of machine-made products.
6. I'll use my artistic talent to make your home more attractive.
7. I'll play my instrument and entertain you.
8. I'll entertain you in the ballet, musicals and sometimes you use my talents.
9. I'll take charge of the set and tell the actor and actress what to do.
10. I'll make the role of a girl come to life for you on T.V. and motion pictures.

A. Actor
B. Actress
C. Singer
D. Singing Teacher
E. Interior Decorator
F. Industrial Designer
G. Commercial Artist
H. Musician
I. Dancer
J. Director

OCCUPATIONAL CLUSTER: Fine Arts and Humanities
JOB FAMILY:

GRADE: 5 Social Studies
TITLE: Unit IX - Lands and People of the Western States
BASIC CONCEPTS:

(1) Ohio has many outstanding cultural and educational opportunities.

(2) A person's relationships with other people, with his employer, and with society affect his own career as well as the careers of others.

(3) Careers in fine arts often require special training.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe the various jobs discussed in this unit (Fine Arts and Humanities). The students will be able to identify pictures of people performing their duties in the fine arts and humanities field.	Actor Actress Commercial Artist Dancer Director Fine Arts Humanities Industrial Design Interior Decorator Musician Singing Teacher	Pre-test Students will produce and direct their own talent show. Students will design and produce their own bulletin boards. General class discussion Post test (same as pre test)	The student will have a more positive attitude toward the world of work. The student will have knowledge of the jobs available in the community in the area of fine arts and humanities.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: FINE ARTS AND HUMANITIES

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY CDEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John In These United States and Canada Boston: D.C. Heath & Co. 1965	Films: "First World Festival of Negro Arts" "Design for Growing"	Actor Actress Artist Commercial Dancer Designer Director Industrial Interior Decorator Singer Singing Teacher	Contact: WVIZ TV, 398-2800 Ext. 43	Contact: WVIZ TV Channel 25 3500 Brookpark Road 398-2800, Ext. 43	Brochures Pamphlets SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objectives one and two will be based on the students' ability to orally identify and describe at least seven out of ten jobs listed in the Fine Arts and Humanities Cluster. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

HEALTH OCCUPATIONS

General Discussion

Health services rank third behind Agriculture and Construction in the employment field. Four major reasons for rapid and continuing growth of the health field include enormous scientific advances, growth in health consciousness on the part of the American public, the nation's prosperity and increased earning power, and the increase in population at the rate of two million persons per year. To put scientific and medical gains into wider applications and to assure that all citizens receive ample health care, more young women and men are needed in this field. Medicine's strongest appeal is that it is dedicated to safe-guarding human life.

HEALTH OCCUPATIONS

PRE-TEST

1. List four major jobs pertaining to hospitals and clinics.

2. Circle the hospital that you are most familiar with: Mt. Sinai, Cleveland Clinic, University Hospitals, Forest City

3. Doctor's duties consist of what?

   A. leader of health team
   B. guardian of nation's health
   C. prevention and cure of diseases of mankind
   D. a person with a high intellect and alert mind
   E. research and understanding of the anatomy and functions of the human beings

4. Does a doctor have to go to school for a great period of time?

5. What is the difference between a Licensed Practical Nurse and a Registered Nurse?

6. What are the duties of aides and orderlies?

7. What are the duties of the dietitian?

8. What is an X-ray machine?

9. Do most hospitals have an emergency entrance?

10. Does the emergency department stay open 24 hrs. a day?

OCCUPATIONAL CLUSTER: Health Occupations
JOB FAMILY:

GRADE: 6 Social Studies
TITLE: Unit IV--Citizens In a Changing America
BASIC CONCEPTS: (1) Information and exploration of jobs are essential to wise career choices

(2) A person's best career direction develops over a long period of time.

(3) People change, and sometimes change careers as they go through life.

(4) Careers in the health field can be very rewarding.

(5) A healthy body is essential to a productive worker.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
As a result of classroom discussion each student will be able to orally define two new words. The students will be able to identify and describe the duties of people seen in the slide presentation The students will be able to identify equipment used by a doctor, nurse, dentist, etc.	Dentist Dental Hygienist Dental Technician Dietitian Doctor Inhalation Therapist Medical records' secretary and librarian Medical Technician Nurse Nutritionist Pharmacist Physical Therapist X-ray Technician	Pre-Test Students will make an oral report on certain job titles. Students will role-play certain careers, doctors, nurses, etc. Open oral discussion on Health Career Topics. Slide presentation Display pictures of equipment used by people in career areas. Post Test(same as pre test)	The students will be more aware of the jobs available in the Health field. Students will be aware of minimum requirements for entrance into these fields. The students will be aware of various health facilities in their neighborhoods.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: HEALTH OCCUPATIONS

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY EVER OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In these United States and Canada Boston: D.C. Heath and Company 1965.	Films: Nurse "Health Careers, Parts I, II, III IV" "Horizon Unlimited" "Secretary Through the Ages of Man"	Dentist Dietitian Doctor Medical Records Librarian Medical Records Secretary Nurse Nutritionist Pharmacist Physical Therapist X-Ray Technician	Contact: Health Careers Speakers--Greater Cleveland Hospital Association 1001 Huron Road 781-2944 Ext. 369	Contact: St. Vincent Charity Hospital Contact Greater Cleveland Hospital Association Health Museum	Books Pamphlets Brochures Posters Bulletin Boards SRA Kits Popeye Career--Comics

EVALUATION: Successful attainment of objectives (2) and (3) will be based on (a) the ability of at least 80% of the students to orally describe and identify 10 out of 14 health careers listed in this unit and (b) the ability of at least 80% of the students to name at least one piece of equipment that would be used by a person working in each of the ten careers selected. Student success on the post-test will be based on the ability of 80% of the students to achieve a 10% accuracy increase over their initial scores on the pre-test

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

HOSPITALITY AND RECREATION

General Discussion

Hospitality and recreation workers contribute to the leisure and comfort of the public. Hospitality occupations usually involve restaurants and hotels. These establishments attempt to replace those comforts one usually enjoys at home. Therefore, the employees must make extra efforts to please. Recreation, of course, is important to most people, whether it is a night at the bowling alley or a week of skiing at a fancy resort. Many millions are employed in these two areas, and the need for good workers is increasing.

PRE-TEST

Fill in the blanks with the proper job title.

1. At the Brown Derby Restaurant, the _____served our dinner promptly.
2. The _____carried our luggage to the rooms.
3. The _____at Joe's Tavern mixed all types of drinks.
4. The _____supervises the children's playrooms.
5. We talked to the _____to reserve a hotel room.
6. When the film broke, the _____fixed it.
7. The _____was very pleased as he greeted us at the door of the hotel.
8. The _____kept the bowling pins set up.
9. Without the _____we couldn't swim safely in the pool.
10. The _____helped him learn all the new dances.

HOSPITALITY AND RECREATION

PRE-TEST KEY

1. waitress
2. bellboy
3. bartender
4. recreation leader
5. reservation clerk
6. motion picture projectionist
7. doorman
8. bowling pin setter
9. lifeguard
10. dance instructor

OCCUPATIONAL CLUSTER: Hospitality & Recreation
JOB FAMILY:

GRADE: 6 Social Studies
TITLE: Unit IV - Citizens in a Changing America
BASIC CONCEPTS:

(1) Most jobs require certain personal qualities as well as skills.

(2) Leisure time activities affect career choices.

(3) Recreational activities expand interest.

(4) Society needs both a producer of goods and a producer of services.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify and describe various jobs in the area of hospitality and recreation. The student will be able to list personal qualities and skills one must have if he plans to work in the area of hospitality and recreation.	Bartender Bellboy Bowling Pin Setter Dance Instructor Doorman Lifeguard Maid Motion Picture Projectionist Recreation Leader Reservation Clerk Waitress	Pre-test Identification game--give students the name of an organization, they must name and describe duties of persons who work there. Students will prepare bulletin boards concerning hospitality and recreation occupations. Post test (same as pre test)	The students will have a more positive attitude toward work and preparation for work. The student will be aware of the fact that one can have dignity and satisfaction in any kind of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: HOSPITALITY AND RECREATION OCCUPATIONS

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVED OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. & Tottle, John. In These United States and Canada Boston: D.C. Heath & Co. 1965		Bartender Bellboy Doorman Maid Motion Picture Projectionist Recreation Leader Reservation Clerk Waitress	Contact: East Cleveland Youth Director	Contact: East Cleveland YMCA, YWCA Manners Hospitality College, 16202 Euclid Ave., East Cleveland, Ohio	Brochures SRA Kits Pamphlets Popeye Career Comics

EVALUATION: The attainment of objectives one and two will be based on the ability of at least 80% of the students to orally describe 85% of the jobs discussed in this Unit. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

MANUFACTURING

AIRCRAFT, MISSILE AND SPACECRAFT

General Discussion

Aerospace industry, the manufacture of aircraft, missile, and spacecraft is among the largest and most rapidly changing industry in the country. Because this industry's products are complex and changing, scientist, engineers and technicians represent a larger proportion of total employment, the workers will account for a higher proportion of the industry's work force through the 1970's.

PRE-TEST True or False

1. Aircraft is one of the largest and most rapidly changing industries in the country.
2. There are two million people employed in the industry.
3. Some private planes cost about the same as a car.
4. Missiles have more complex guidance and control systems than aircraft.
5. Special tools are not needed to fix these vehicles.
6. Aerospace jobs are very important jobs.
7. Aerospace factories branch off the large factories.
8. Technical Occupations are the most important jobs.
9. Professional Occupations are the second important jobs.
10. There is only one kind of engineer employed in the aerospace work.

OCCUPATIONAL CLUSTER: Manufacturing
JOB FAMILY: Aircraft, Missile & Spacecraft

GRADE: 5 Social Studies
TITLE: Unit VIII Ohio
BASIC CONCEPTS:

(1) Careers require different knowledge, abilities and attitudes.

(2) Every individual can have a meaningful, rewarding career.

(3) Every career requires some special preparation.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify and describe various jobs in the aircraft, missile and spacecraft industry. The student will be able to identify pictures of various people on-the-job in the aircraft, missile and spacecraft industry.	Astronomer Chemist Draftman Electrical engineer Machinist Mathematician Mechanic Missile assembly Nuclear engineer Sheet metal worker Tool and die maker	Pre-test Students will bring in pictures of airplanes, jets, and missiles for a bulletin board. Assign groups of students to make a model airplane. Have the students bring in toy aircraft they might have at home, ask students to identify and state function of these parts. Post test (same as pre-test)	The students will have a more positive attitude toward the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS

OCCUPATIONAL CLUSTER: MANUFACTURING-Aircraft, Missile & Spacecraft

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John In These United States and Canada Boston: D.C. Heath & Co. 1965	"Airplanes and How They Fly" "Airplanes Work for Us"	Astronomer Chemist Draftsman Electrical Engineer Machinist Mathematician Mechanic Missile Assembly Nuclear Engineer Sheet Metal-Worker Tool and Die-Maker	Contact: The National Aeronautics and Space Administration 433-4000	Contact: National Aeronautic and Space Administration 2100 Brookpark Road Cleveland, Ohio 433-4000	Pamphlets Brochures SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objectives one and two will be based on the ability of all students to orally identify and describe seven out of eleven jobs in the area of Aircraft, Missile and Spacecraft. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

MANUFACTURING

ALUMINUM INDUSTRY

General Discussion

In the past ten years the aluminum industry has gone from a limited speciality metal to a wide-spread commodity, second only to iron and steel. Aluminum is used in cars, homes, food packaging, and a thousand other things. Because this is a relatively new industry, the potential job situation is boundless.

Some of the jobs are: casting operators who have charge of the pouring station in which molten metal is cast into molds, scalper operators who run the scalper machine which cuts the metal into four inch layers, soaking pit operators who manage the furnace and sets controls to adjust temperature and heating, rolling mill operators who run a machine that flattens the strips of metal into the desired thickness, coiler operator who runs a machine which takes the strips of metal and puts them on a coil or roll.

ALUMINUM INDUSTRY

PRE-TEST

PART I

Match the definitions to the correct jobs.

A. Casting Machine operator

B. Scalper operator

C. Soaking pit operator

D. Rolling mill operator

E. Coiler operator

_____1. He manages the furnace and sets the temperature and heating controls.

_____2. He runs the machine that flattens the strips of metal.

_____3. He rolls the flattened metal on coils.

_____4. He runs a machine that cuts the metal into four inch layers.

_____5. He pours the molten metal into molds.

PART II

True or False

_____1. The aluminum industry is a closed field for job opportunities.

_____2. Aluminum is the second largest metal industry behind iron and steel.

_____3. Aluminum was always such a widespread commodity.

_____4. Aluminum is used in housing, cars, food packaging, etc.

_____5. A campaign has begun to recycle aluminum products. (BONUS)

KEY

PART I	PART II
1. C	1. F
2. D	2. T
3. E	3. F
4. B	4. T
5. A	5. T

OCCUPATIONAL CLUSTER: Manufacturing
JOB FAMILY: Aluminum Industry

GRADE: 6 Social Studies
TITLE: Unit V Canada, Our Neighbor to the North
BASIC CONCEPTS:

(1) Canada's history, physical features, resources and industrial development are similar to those of the United States.

(2) The presence of abundant natural resources has been an important factor in Canada's industrial development.

(3) Cleveland employs the largest percent of its population in manufacturing jobs.

(4) Careers require different knowledge, abilities and attitudes.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe various duties of people working in the Aluminum industry. The student will be able to list or state some of the uses of aluminum. After viewing slides, the students will be able to identify the jobs of persons on the slides.	Aluminum Casting operator Coiler operator Recycling Rolling mill operator Socking pit operator	Pre-test Student will bring in an article made of aluminum. Discussion will follow. Student will organize a small campaign for recycling aluminum cans. Student will make bulletin boards displaying aluminum products. Post test (same as pre test)	The student will be aware of the importance of the aluminum industry in our daily lives. The student will have a more positive attitude about the many opportunities in the city of Cleveland.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: MANUFACTURING-Aluminum Industry

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John In These United States and Canada Boston: D.C. Heath & Co. 1965	Film: "Careers in Industry"	Casting operators Rolling mill-operators Scalper operators Soaking Pit Operators	Contact: Public Relations Dept. at Alcoa Manufacturing	Contact: Alcoa Manufactoring 2210 Harvard Cleveland, Ohio 641-3600	Pamphlets Brochures SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objectives one and three will be based on the ability of at least 80% of the students to orally identify and describe 70% of Aluminum Industry jobs discussed in this Unit.

All students will be able to orally name four different uses of aluminum. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

MANUFACTURING

APPAREL INDUSTRY

General Discussion

The apparel industry deals with the making of garments. The garment styles are created by designers. Afterwards a master pattern has to be made by the pattern makers. The patterns are marked and cut, then put together and sewed. Some garments have to be fitted or altered. After the garments are completed they are then pressed by the pressers, and ready for sale.

Designers - create original designs for new types of apparel.

Pattern makers - construct a full-size master pattern.

Markers - trace the pattern pieces on large sheets of paper.

Cutters - cut out various garment pieces from layers of cloth.

Sewing machine operators - Specialize in a single operation such as sewing shoulder seams.

Hand sewers - use needle and thread to perform various operations ranging from simple sewing to stitching.

Inspectors and checkers - examine garments for proper workmanship.

Tailors and Dressmakers - make personalized clothes, fitted to one individual.

Alterations - alter clothes for a perfect fit.

Pressers - persons who press a finished garment.

APPAREL INDUSTRY

PRE-TEST

Match the definitions with the word that it defines.

1. Designers
2. Pattern makers
3. Markers
4. Cutters
5. Sewing machine operators
6. Hand sewers
7. Inspectors and checkers
8. Tailors and dressmakers
9. Alterators
10. Pressers

Definitions

a. creates original designs for new clothes.

b. trace the pattern pieces on large sheets of paper.

c. constructs a full-size master pattern.

d. use needle and thread to do simple sewing or stitching.

e. cuts out various garment pieces from layers of cloth.

f. examine garments for proper workmanship.

g. specialize in one area like sewing shoulder seams.

h. person who presses garments.

i. make personalized clothes and fit them perfectly to one individual.

j. alter clothes to fit perfectly.

OCCUPATIONAL CLUSTER: Manufacturing
JOB FAMILY: The Apparel Industry

GRADE: 5 Social Studies
TITLE: Unit V Lands and People of the Northeast-Middle Atlantic States
BASIC CONCEPTS:

(1) The apparel industry provides many different jobs for people living in the city of Cleveland.

(2) Various industries in Cleveland are in constant search for workers with qualifying skills.

(3) Every career requires some special preparation.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe the jobs in slides of people working in the apparel industry. The students will be able to identify some of the tools used by people working in the apparel industry.	Alteration Apparel Bushelmen Cutter Designer Marker Pattern maker Presser Tailor	Pre-test Classroom discussion Students will make a bulletin board with different materials and patterns. Students will organize their own fashion show to show various types of apparel. The students will check to see whether members of their family work in the apparel industry Post test (same as pre test)	The student will exhibit a more positive attitude towards self, others, and work. The student will be aware of the many apparel factories in the city of Cleveland.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: MANUFACTURING-The Apparel Industry

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John In These United States and Canada	Films: "Fiber to Fabric" "Mass Production" (How Clothing is Made) "Clothes Around the World"	Bushelmen Cutter Designer Dressmaker Hand Sewers Inspector and Checker Pattern Maker Presser Sewing Machine Operators Tailor Thread Trimmers and Cleaners	Contact: Bobbie Brooks Richmond Brothers	Contact: Bobbie Brooks Lyon Tailors Richmond Brothers	Posters Pamphlets SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objectives one and two will be based on: (a) the ability of at least 80% of the students to visually identify sever out of ten tools used by workers in the Apparel Industry, and (b) the ability of at least 80% of the students to orally identify and describe 75% of the jobs listed in this Unit. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

MANUFACTURING

INDUSTRY - PAPER AND ALLIED PRODUCTS

General Discussion

The paper and allied products industry yearly employs thousands of people to produce many paper products such as newsprint, business forms, facial tissues, building board, paper bags, writing paper, and paper-board containers and boxes. The industry employs workers in occupations ranging from unskilled to highly specialized technical and professional jobs, many found only in the paper industry. Many women work in this field working as machine operators and inspectors in the plants, and some in office jobs.

Workers in the field are employed in a wide variety of occupations, requiring a broad range of training and skills. Many operate special machines while others install and repair them. Truck and tractor drivers, guards, watchmen, janitors, bookkeepers, clerical personnel, sales and administrative personnel, are employed in the paper industry.

INDUSTRY - PAPER AND ALLIED PRODUCTS

PRE-TEST

PART I - Matching

1. This machine cleans the bark from tree logs. _____

2. These workers maintain, install, and repair the machines used to make paper. _____

3. This man cooks wood chips. _____

4. The quality of the paper depends largely on him. _____

5. The machine he operates gives paper a glossy look. _____

A. Millwright
B. Paper Machine Operator
C. Barker
D. Supercalendar Operator
E. Digester Operator

PART II - True or False

1. Women do not work in paper plants. _____

2. Pulp is a baby dog. _____

3. Paper workers are all unskilled. _____

4. The paper industry is highly mechanized. _____

5. Paper mills are found only in California. _____

KEY

PART I-Matching	PART II-True or False
1. C	1. F
2. A	2. F
3. E	3. F
4. B	4. T
5. D	5. F

OCCUPATIONAL CLUSTER: Manufacturing
JOB FAMILY: Paper and Allied Products

GRADE: 5 Social Studies
TITLE: Unit IV Lands and People of the Southern and North Central States
BASIC CONCEPTS:

(1) Ohio is strategically located as a center for industry in the North Central States.

(2) Careers require different knowledge, abilities, attitudes.

(3) A person may be suited for several different careers.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to list and state the function of at least five different paper products used in his home.	Barker Machine-Operator Digestor Operator Millwright Paper Machine-Operator Super Calendar-Operator	Pre-test Students will develop a chart showing how paper is made. Students will give oral reports on certain jobs in the paper industry. Students will list various paper products in their homes. Post test (Same as pre test)	The student will be more aware of the various levels of skills required for certain jobs. The student will have a more positive attitude toward the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: MANUFACTURING-Paper & Allied Products Industry

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tuttle, John In These United States and Canada	Films: "How Trees Help Us"	Barker Machine Operator Digester Operator Millwright Paper Machine Operator Super Calendar Operator	Contact: International Paper Company, Rockefeller Building, 696-0620	Contact: International Paper Company, Rockefeller Building, 696-0620	Brochures Pamphlets SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objectives one and two will be based on: (a) the ability of all students to orally state the names and functions of at least five different paper products used in the home, and (b) the ability of at least 80% of the students to orally identify and describe at least five different careers associated with the Paper and Allied Products Industry.
Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

MANUFACTURING

INDUSTRY-IRON AND STEEL

GENERAL DESCRIPTION:

The nation's high and rising standard of living depends on its ability to produce great quantities of steel. Also its military strength depends upon this industry. It is one of the nation's largest employers. Employee's work in a wide range of jobs requiring a variety of skills-from unskilled to technical and professional jobs.

PRE-TEST

MATCHING

1. Forms dies by using machine tools
2. Records shipping and receiving of a company
3. Operate welding equipment to join metal parts in repairing and rebuilding plant machinery.
4. Has responsibility of checking orders received and orders shipped out of a company.
5. Supervises the operation of electrical and elctronic equipment and facilities that provide the power needed in modern steel mill operations.
6. They make and repair metal parts for machines and equipment.
7. Assist chemists and engineers in research and development work and in quality control.
8. Hands out assignments also, responsible for distributing materials.
9. Works in a laboratory, using chemicals.
10. Operates within an assigned area, and coordinates schedules.

	Key
A. Chemist	(9)
B. Maintenance Mechanic	(6)
C. Die Makers	(1)
D. Engineer (Electrical)	(5)
E. Maintenance Welder	(3)
F. Distribution Clerk	(8)
G. Shipping Clerk	(2)
H. Order Checkers	(4)
I. Laboratory Technician	(7)
J. Dispatcher	(10)

OCCUPATIONAL CLUSTER: Manufacturing
JOB FAMILY: Iron and Steel Industry

GRADE: 5 Social Studies
TITLE: Unit V - Lands and People of Northeast--Middle Atlantic States
BASIC CONCEPTS:

(1) Cleveland's image has been built as an "iron and steel" center.

(2) Information and exploration of jobs are essential to wise career decisions.

(3) Large centers of population provide markets for products and job opportunities that help satisfy both the basic needs and the desires of the people.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to list some of the products produced by the iron and steel industry. The student will be able to identify some of the tools and instruments used in the iron and steel industry. The student will be able to describe the duties of various workers discussed in this unit.	Chemical Engineer Die Maker Dispatcher Distribution Clerk Electrical Engineer Industrial Engineer Maintenance Mechanic Mechanical Engineer	Pre-test Ask students if any member of their family works for the iron and steel industry. If answer is yes, ask to make a report on the specific duties of that family member. Cross-word puzzles Design bulletin boards with pictures of different types of steel. Role-playing Post test (same as pre-test)	The student will be aware of the importance of the Iron and Steel Industry to Cleveland's business community. The student will have a more positive attitude toward the world of work. The student will be more aware of various jobs available in the city of Cleveland in the iron and steel industry.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: MANUFACTURING-Iron and Steel Industry

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tootle, John In These United States and Canada Boston: D.C. Heath and Co. 1965	Films: "Industry" "Careers in Industry" "Steel in America"	Chemist Die Maker Dispatcher Distribution Clerk Engineers (Chemical, mechanical, electrical, industrial) Lab Technicians Maintenance Mechanic Maintenance Welder Order Clerks	Contact: Warner & Swasey	Contact: Republic Steel Jones & Laughlin Co.	Posters Pamphlets SRA Kits Popeye Career Comics

EVALUATION: The attainment of objectives one and two will be based on the ability of at least 80% of the students to orally cite five different products produced by the iron and steel industry and orally describe at least 75% of the jobs listed in this Unit.
Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

MANUFACTURING-INDUSTRIAL CHEMICAL

GENERAL Discussion

The Industrial Chemical Industry is made up of plants which manufacture industrial inorganic and organic chemicals, plastic materials and synthetic resins, synthetic rubber and other man-made fibers, except glass. These chemicals are used mainly by other companies in the chemical industry, and by other manufacturing industries as raw materials or as processing agents to make their own products.

Industrial chemicals unlike other chemical products, such as drugs, soaps, detergents, cosmetics, perfumes, paints, and fertilizers, are not sold directly to the consumer without further processing.

Inorganic chemicals come from nonliving matter, such as salt, sulfur, mineral ores, and limestone. They are basic materials for making, or helping to make other chemicals as well as finished products, such as steel, glass, paper, and gasoline.

PRE-TEST

MATCHING

1. Make and repair parts for machines and equipment.
2. Maintain and repair wiring, motors, switches, and other electrical equipment.
3. Install and repair electrical and electronic instruments and control devices.
4. They lay, install, and repair pipes and pipefittings.
5. Work in research and development laboratories.

		Key
A.	Instrument Repairmen	(3)
B.	Pipefitters	(4)
C.	Maintenance Machinists	(1)
D.	Chemist	(5)
E.	Electrician	(2)

6. Name two types of engineers.

7. List several duties of a chemist.

8. A_____'s job is to control the various pieces of equipment which convert raw materials into chemical products by setting dials or devices that measure the exact amount of material to be processed and control temperature, pressure, and flow of materials.

9. _____work in research and development laboratories.

10. Describe the duties of the pipefitters.

INDUSTRIAL CHEMICAL INDUSTRY

STUDY SHEET

Maintenance Machinists - Make and repair parts for machines and equipment.

Electricians - Maintain and repair wiring motors, switches, and other electrical equipment.

Instrument repairmen - Install and repair electrical and electronic intruments and control devices.

Plant Worker - One who operates or maintains equipment and performs a variety of other task in industrial chemical plants.

a. Truck and Tractor Drivers

b. Inventory

C. Guards

D. Unloads and loads

E. Watchmen

F. Janitors

Chemical Operators & Helpers - They control the various pieces of equipment which convert raw materials into chemical products by setting dials or devices that measure the exact amount of material to be processed and control temperature, pressure, and flow of materials.

Pipefitters - They lay, install, and repair pipes and pipefitting.

Chemical Engineers - Apply their knowledge of both chemistry and engineering to the design, construction, operation, and improvement of chemical equipment and plants.

Electrical Engineers - Design and develop electrical and electronic machinery and equipment such as control devices and instruments, as well as facilities for generating and distributing electric powers.

Lab Technician - Assist chemists and engineers in research and development work, and in quality control.

Chemist - Works in research and development laboratories.

OCCUPATIONAL CLUSTER: Manufacturing
JOB FAMILY: Industrial Chemical

GRADE: 5 Social Studies
TITLE: Unit V - Land and People of the Northeast--Middle Atlantic States
BASIC CONCEPTS:

(1) Cleveland is a leader in the petroleum chemical industry.

(2) Cleveland's chemical industry provides more than 16,000 jobs for qualified people in the city of Cleveland.

(3) Every career requires some special preparations.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify in a general sense, some of the tools used by workers discussed in this unit. The students will be able to identify and describe the jobs and duties of individuals on slides produced by the DVEP office.	Chemical Engineer Chemical operators and Repairmen Chemist Draftsmen Electrician Instrument Repairmen Job Family Laboratory Technician Mechanical Engineer Pipefitter	Pre-test Students will prepare individual reports on chemical occupations. Students will bring in different advertisements for chemicals such as soap, bleach, etc. Post test (same as pre-test)	The student will be more aware of the world of work. The student will be more aware of the many different jobs that exist in a Job Family.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: MANUFACTURING-Industrial Chemical

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottie John In These United States and Canada Boston: D.C. Heath and Co. 1965	Films: "Careers in Industry"	Chemical Engineer Chemical Operators and helpers Chemist Draftsmen Electricians Instrument Repairmen Lab Technicians Machinist Mechanical Engineers Pipefitters	Contact: Allied Chemical Co., Public Relations Office-241-7474	Contact: Allied Chemical Co., Contact Public Relations Office-241-7474	Brochures Pamphlets Popeye Career Comics (Manufacturing)

EVALUATION: The criteria for the successful attainment of objectives one and two will be based on the ability of 80% of the students to orally identify 70-75% of the jobs listed in the Industrial Chemical job family. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

MARINE SCIENCE

General Discussion

The ocean which covers more than two-thirds of the earth's surface, provides valuable foods and minerals, influence the weather, serves as a "highway" for transportation, and offers many varieties of recreation.

Oceanographers study the ocean--its characteristics, movements, physical properties, and plant and animal life. Oceanographers plan extensive tests and observational programs, and conduct surveys and experiments to obtain information about the ocean.

Most oceanographers are specialists in one of the branches of the profession.

1. Biological Oceanographers (Marine biologists) study the ocean's plant and animal life and the environmental conditions affecting them.

2. Physical Oceanographers (Physicist and geophysicist) study the physical properties of the ocean, such as its density, temperature, and ability to transmit light and sound; the movements of the sea; and the relationship between the sea and the atmosphere.

3. Geological Oceanographers (Marine geologist) study the topographical (descriptive) features, rocks, and sediments of the ocean floor.

4. Chemical Oceanographers investigate the chemical composition of ocean water and sediments, and chemical reactions that occur in the sea.

5. Marine Meteorologists study the interaction of the atmosphere and the ocean, and the processes by which weather over the ocean is generated.

6A. Oceanographic Engineers and 6B. Electronic Specialists design and build the systems, devices, and instruments used in oceanographic research and operations.

MARINE SCIENCE

PRE-TEST

Matching

These people are specialists in one of the branches of the Oceanography professions.

Match the job title with the duties of each scientist:

1. Biological Oceanographer
2. Physical Oceanographer
3. Geological Oceanographer
4. Chemical Oceanographer
5. Marine Meteorologist

_____A. Study the topographic (descriptive) features, rocks, and sediments of the ocean floor.

_____D. Study the interaction of the atmosphere and the ocean, and the processes by which weather over the ocean is generated.

_____C. Study the physical properties of the ocean, such as its density, temperature, and ability to transmit light and sound; the movements of the sea and the relationship between the sea and the atmosphere.

_____D. Study the ocean's plant and animal life and the environmental conditions affecting them.

_____E. Investigate the chemical composition of ocean water and sediments, and chemical reactions that occur in the sea.

Underline the correct answer.

6. Biological Oceanographers are sometimes called
(A. Botanist, B. Nutritionist, C. Marine Biologists)

7. Physical Oceanographers are sometimes called
(A. Pathologists, B. Physicist and Geophysicist. C. Biochemists)

8. Geological Oceanographers are sometimes called
(A. Marine Geologists, B. Geneticists,
C. Zoologists)

True or False

_____9. The ocean covers two-thirds of the earth's surface.

_____10. The ocean does not provide any valuable foods and minerals.

OCCUPATIONAL CLUSTER: Marine Science Occupations
JOB FAMILY:

GRADE: 6 Social Studies
TITLE: Unit VIII-Lands of the Caribbean: Central America and the West Indies
BASIC CONCEPTS:

(1) An understanding of science helps people in their work.

(2) There are many interesting and exciting careers working above and below the sea.

(3) Careers require different knowledge, abilities, and attitudes.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify and state the function of various types of equipment used by people in Marine Science Occupations. The students will be able to identify and describe various marine science careers discussed in this unit.	Biological Oceanographer Chemical Oceanographer Geological Oceanographer Marine Biologist Marine Meteorologist Oceanography Physical Oceanographer Skin Diver Topography	Pre test Set up classroom aquarium. Role-playing: Have student bring in large box. Make a moderate size porthole large enough for students to enter the box and play out certain parts of the oceanography profession. Let each student explain his own duties and tell what part he plays in the study of the ocean. Post test	The students will be more aware of the many marine science occupations. The student will be more aware of the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: MARINE SCIENCE OCCUPATIONS

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVSP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John. In These United States and Canada Boston: D.C. Heath & Co. 1965	Films: "Exploring the Ocean" "What's Under the Sea"	Marine Marine Biologist Marine Geologist Meteorologist Oceanographers Skin Diver	Contact: The Cleveland Aquarium 391-1527 Cater Zone, School Science Coordination, Woodhill Quincy Building	Contact: The Cleveland Aquarium, 601 East 71st Cleveland, Ohio 391-1527 The Cleveland Zoological Park, Denison at Fulton Parkway 661-6500	Pamphlets Brochures Popeye Career Comics (Marine Science Careers) SRA Kits

EVALUATION: At least 85% of the students in fifth grade social studies, upon completion of the study of the Unit on Marine Science Occupations, will be able to orally describe at least 75% of the jobs listed in the Marine Science Cluster.
Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

MARKETING AND DISTRIBUTION

GENERAL DISCUSSION

Marketing and distribution is one of our newer occupations. Previously, manufacturers developed products, which they hoped the public would buy, but had little or no evidence to support their hopes that they would sell. The need arose for reliable information regarding public attitudes toward their products, and to calculate future purchases. The market,research man is basically a fact finder who gathers, analyzes and interprets information and prepares a report forecasting how much a product will sell. He may also help to choose an attractive brand name, suggest an appropriate price, and decide on the type of advertising that should stimulate sales best.

Research is supposed to answer such questions as: Is there a market for this product? If so, What are its limits? Who uses this product? Where, when, why, and how is it used? Where, when, why, and how do users choose among competing brands? Is the product made right? How can it be improved? Is it packaged right? Is it priced right? Is it distributed properly and sufficiently? When where, how should it be sold? When, where, and how should it be advertised? What selling appeals will be most effective? How effective is the advertising?

To gather, interpret, and report marketing and distribution of this information, the Research Department includes the following:

The planning groups, consisting of research account managers who serve as the middlemen for the client and the agency. They design research projects

and create research questionnaires in cooperation with the specialists of the operations group and under the guidance of the research director. The operations group is composed of specialists in all the various types of research.

The service group includes field interviewers, tabulators, statistical analysts, and research presentation writers. This group conducts interviews, in the field or by mail, and assembles, tabulates and reports its findings through the research director and account manager to the client.

PRE-TEST

TRUE OR FALSE

_____ 1. Distribution deals with selling, retailing, and wholesale merchandising.

_____ 2. Marketing usually happens on Friday at the grocery store.

_____ 3. The market researchers never makes decisions about a product.

_____ 4. Surveys conducted by the marketing researchers can tell how much a product will sell for.

_____ 5. Distribution workers decide if more or less merchandise should be placed in a store.

KEY

1. T
2. F
3. F
4. T
5. T

OCCUPATIONAL CLUSTER: Marketing and Distribution
JOB FAMILY:

GRADE: 5 Social Studies
TITLE: Unit IV - Lands and People of the Northeast
BASIC CONCEPTS:

(1) Cleveland is steadily growing as a distribution center--Cleveland is ideally situated close to markets and with motor, rail, air and water transportation readily available.

(2) Every individual can have a meaningful, rewarding career.

(3) Many kinds of careers are available in the Cleveland community.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify different kinds of jobs people have in the area of Marketing and Distribution and some contributions each one makes to the community. The students will be able to identify some of the basic tools used by individuals working in marketing and distribution careers--they should know the functions of some of these tools.	Account Manager Distribution Field Interviewer Marketing Marketing Researcher Research Presentation Statistical Analyst Survey Tabulator Writers	Pre-test Students will make bulletin boards dealing with marketing and distribution occupations. Students will do posters. Oral discussions. The students will learn the tools used in marketing and distribution occupations. The students will set up mock store with emphasis on the way products are displayed. Post test (same as pre test)	The students will be more aware of marketing and distribution jobs that exist in their community. The students will have a more positive attitude toward the world of work. The student will be more aware of general requirements for obtaining jobs in this field.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: MARKETING AND DISTRIBUTION

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DWEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John. In These United States and Canada. Boston: D.C. Heath and Co. 1965	Films: "Careers in Sales" "The Joys of Selling"	Account Manager Field Interviewer Marketing Researcher Research Presentation Writer Statistical Analyst	Contact: American Marketing Association The Wellman Company 1405 East 6th Street 241-6056 Griswold-Eshleman Co. 55 Public Square Cleveland, Ohio 44113	Contact: Sears, Roebuck & Co. 8501 Carnegie Avenue Cleveland, Ohio Eaton Corporation 35599 Curtis Blvd. Eastlake, Ohio 523-7255	Pamphlets Posters SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objective one will be based on the ability of at least 80% of the students to orally identify and describe at least 75% of the jobs listed in this Unit. All students will be able to identify seven out of ten tools used by individuals working in Marketing and Distribution careers. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

PERSONAL SERVICES

General Discussion

The long term growth in the American economy has created a growing demand for services of all kinds. Thus, in addition to the multitude of goods produced and distributed, a growing share of our national wealth and manpower is being devoted to needed services, resulting from greater emphasis on better medical care, quality education, personal services, and recreational activities. In many ways, the rapid growth in the importance of the service industries reflects the country's aspiration for a better and fuller life for all of its citizens.

PRE-TEST

Name these people:

1. I take care of hair. _____
2. I make sure your clothes are pressed, laid out, and ready for wear. _____
3. I may drive your limousine for you. _____
4. I take care of the household cleaning. _____
5. I keep the children. _____
6. I prepare the meals. _____
7. I clean and wash your household laundry. _____
8. I take charge of your children. _____
9. I take your orders when you eat in a restaurant. _____
10. I take care of your land and garden. _____

PERSONAL SERVICES

PRE-TEST KEY

1. Barber, Beautician
2. Maid, Valet
3. Chauffeur
4. Housekeeper
5. Babysitter
6. Cook
7. Laundress
8. Governess
9. Waitress
10. Landscaper

OCCUPATIONAL CLUSTER: Personal Services Occupations
JOB FAMILY:

GRADE: 5 Social Studies
TITLE: Unit V--Lands and People of the Northeast--New England States
BASIC CONCEPTS: (1) Fourteen percent of Cleveland's work force is employed in providing services

(2) The long term growth in the American economy has created a growing demand for services of all kinds--people are paid to perform these services.

(3) Any career has different levels of responsibility.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to list personal service jobs performed by members of their families. The students will be able to describe and identify the jobs and duties of individuals presented in slide presentation on Personal Service Occupations.	Babysitter Barber Beautician Building custodian Chauffeur Companion Cook Cosmetologist Governess Housekeeper Landscaper Laundress Odd Job Man Valet, maid Waitress	Pre-Test Hands on experience with Job Experience Kits. "Beauty Parlor Day"-- Students will roleplay the various duties of a beautician, barber, etc. Students will set up a household situation--assign roles of governess, valet, etc. Post Test (same as pre test)	The student will be aware of the fact that one can have pride and dignity in any kind of work. The student will demonstrate a positive attitude toward self, others, and the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: PERSONAL SERVICES OCCUPATIONS

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In These United States and Canada. Boston: D.C. Heath and Company 1965	Title: "Beauty for a Career" "Careers in Personal Services"	Barber Beautician Governess Odd Job man Valet	Contact: Jane Addams Vocational High School East 30th and Community College Avenue Cleveland, Ohio 621-2131	Contact: Jane Addams Vocation High School East 30th and Community College Avenue Cleveland, Ohio 621-2131	Pamphlets Brochures SRA Kits Popeye Career Comics People and Choices Career Folios Occupational Outlook Handbook

EVALUATION: The attainment of behavioral objectives number (1) and (2) will be based on the ability of at least 80% of the students to write or orally discuss at least 75% of the jobs listed in this unit. Student success in this unit will be based on the ability of at least 60% of the students to achieve a 10% accuracy increase over their initial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

PUBLIC SERVICES - UTILITIES (lights and Telephone)

Nearly every American home is dependent on the telephone and electricity. Virtually no business or community could function without the use of these two utilities. Without the telephone, communicating with friends and business associates would be more difficult and probably take longer. Without electricity, most of us could not use the appliances in our homes and many factories would have to shut down.

Many people are involved in making the electricity available for our homes. Linemen construct and maintain the powerlines that carry electricity from the generators to our homes. The load dispatcher is the key operating worker of the transmission and distribution departments. The metermen install, test, maintain and repair meters on customers' premises.

Many people are necessary to make the convenience of the telephone a reality. The lineman places the wires and cables leading from the central office to customers' premises. He also repairs and maintains these wires. After the lines are placed, the cable splicer completes the connection or matching wire colors within the cable. The installer and repairman make the phone in your home available and maintain it. The telephone operator assists in emergencies, information and making long distance calls.

Truly all of the light and telephone workers work for you and your convenience.

PUBLIC SERVICES - UTILITIES

PRE-TEST

NAME THESE PEOPLE FROM THE LIST BELOW

1. This person will place your long distance phone calls.
2. This man will install your phone or repair it if it is broken.
3. I complete the connection after the lineman places the cable on the phone.
4. I place wires and cables loading from the central office to the customer.
5. I construct and maintain the power lines which carry electricity.
6. I install, test, and maintain meters.
7. I control the amount of electricity throughout an area.
8. I control the output of materials used for doing a job.
9. Electricity operates your telephone. (TRUE OR FALSE)
10. The electric meter on your house is read by the meterman (TRUE OR FALSE)

Cable splicer
Telephone operator
Stock clerk
Lineman
Installer & repairman
Lineman high & low
Meterman
Load dispatcher

OCCUPATIONAL CLUSTER: Public Services
JOB FAMILY: Utilities: Light & Telephone

GRADE: 6 Social Studies
TITLE: Unit III--How the Country Grew: A New America Grows Up
BASIC CONCEPTS:

(1) Cleveland's utilities are oriented toward providing continually improving customer service.

(2) Information and exploration of jobs are essential for wise career decisions.

(3) Every occupation contributes to society.

(4) Careers require different knowledge, abilities, and attitudes.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe various jobs in light and telephone job family.	Cable Splicer Customer Electricity Job family Lineman (High & Low) Load dispatcher Meterman Sales Representative Stock Clerk Telephone operator	Pre-test Demonstration lesson on how to use a telephone General class discussion of slide presentation Students will collect pictures from newspaper and magazines of people working in light and telephone utilities Students will make a bulletin board Post test (same as pre test)	The students will have a more positive attitude toward the world of work. The student will have a general knowledge of how to use the phone. The student will have general knowledge of the services people working in the light and phone utilities render to the community.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: PUBLIC SERVICES - UTILITIES: TELEPHONE LIGHT AND

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In These United States and Canada Boston: D.C. Heath and Company 1965	Films: "The Telephone For Help" "Electricity and How It Works"	Cable Splicer Lights Lineman Lineman (High and Low) Load Dispatcher Meter Man Stock Clerk Telephone Telephone Operator	Contact: Ohio Bell's Speaker Bureau	Contact: Ohio Bell Telephone Company Municipal Light and Power Plant	Books Pamphlets Brochures SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objective (1) will be based on the students' ability to orally describe at least 75% of the jobs listed in this unit. The attainment of post test objectives will be based on the ability of at least 80% of the students to achieve a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL RESOURCE MATERIALS

PUBLIC SERVICES

GAS AND WATER

General Discussion

The transportation, communication, and public utilities industries make possible the smooth functions of our society and produce most of the energy that powers, heats, and lights our homes and factories. The transportation industry moves goods and people about the country by air, rail, water, and highways. The communication industry highway provide communications systems such as telephones, radio, and television broadcasting. Other public utilities supply the nation with electricity, gas, and the sanitation services. Transportation, communication, and public utility firms are all semi-public in character. Some state and local governments operate their own transit lines or electric companies as well as other types of utilities.

PRE-TEST

1. How are gas bills determined?
2. How are water bills determined?
3. Where does most of the power for utilities come from?
4. How often is the gas bill issued?
5. How often is the water bill issued?
6. Who is responsible for the payment of the water bill?
7. Who purifies the water?
8. How is gas transported to the home?
9. Where does the water that we use in our homes come from?
10. Where does the gasman get the gas from?

OCCUPATIONAL CLUSTER: Public Services
JOB FAMILY: Gas and water

GRADE: 6 Social Studies
TITLE: Unit III--A New America Grows Up--How The Country Grew
BASIC CONCEPTS: (1) Career education and training is an on-going process.

(2) Every occupation contributes to society.

(3) Cleveland's utilities are oriented toward providing continually improving customer service.

(4) A person may be suited for several different careers.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe various jobs in the Cleveland Gas and Water department. The students will be able to list the duties of people shown in the slide presentation. The students will be able to identify various tools used by people working in gas and water utilities.	Chemist Construction Laborer Geologist Meter Reader Mining Engineer Public utilities Stationary Engineer Supervisor Welding Engineer	Pre-test Students will prepare reports on various jobs in gas and water utilities. General discussion of career topics. Post test (same as pre test)	The student will have a more positive attitude toward the world of work. The student will be more aware of the various gas and water utilities that exist in his community.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: Public Services - GAS AND WATER

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In These United States and Canada Boston: D.C. Heath and Company 1965	Films: "Simple Demonstrations With Water" "Conserving our Natural Resources"	Construction Chemist Gas Geologist Laborer Meter Reader Mining Engineer Stationary Engineer Supervisor Water Welding Engineer	Contact: City of Cleveland Department of Public Utilities	Contact: Cleveland Water Department Division of Water and Heat Room 104 Cleveland City Hall 861-4600 Ext 443-444	Pamphlets Brochures Books Popeye Career-Comics

EVALUATION: The attainment of objectives (1) and (2) will be based on the ability of at least 80% of the students' to orally describe at least 70-75% of the jobs discussed in this unit. Criteria for teacher rating of oral reports given in class will be that eight out of ten students must be able to identify at least 75% of the jobs listed in this unit. The attainment of post test objectives will be based on the ability of at least 80% of the students to achieve a 10% accuracy increase over their initial scores on the pre test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS

PUBLIC SERVICES - POLICE DEPARTMENT

General Discussion

The policeman helps to preserve law and order. He prevents criminal activity, investigates crime, apprehends, and assists in the prosecution of criminals. Whether on or off duty, the policemen are expected to exercise authority whenever necessary. The Police Safety Aide, under supervision, assists police officers and other safety personnel in various locations.

Every city, town and village in the United States has some sort of police department, yet no two departments are alike. Each is working to preserve law and order. In each department policemen work to prevent criminal activity, investigate crime, apprehend criminals and assist in their prosecution.

The job of a policeman is big. Because it is so big, policemen often specialize in one area of police work such as burglary investigation, homicide, traffic control and safety, crowd control, juvenile investigation, etc. Before specializing, however, many policemen start out as patrolmen.

PRE-TEST

1. What are the duties of a patrolman?
2. What is a Public Safety Aide?
3. What does a radio dispatcher do?
4. What is the job of a dog warden?
5. What is the job of a blacksmith in a police department?
6. What is an institutional guard?
7. Name some equipment that the policeman uses.
8. Name some different jobs in the Police Department.
9. Where is the main police station located?
10. When a policeman is off duty is he expected to exercise authority?

OCCUPATIONAL CLUSTER: PUBLIC SERVICES
JOB FAMILY: POLICE DEPARTMENT

GRADE: 6 Social Studies
TITLE: Unit IV--Citizens In a Changing America
BASIC CONCEPTS: (1) Career Education and training is an on-going process

(2) Jobs and skills can be related to school work.

(3) Every occupation contributes to society.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify uniforms worn by members of fire department. The students will be able to identify various pieces of gear used by members of fire department. The students will be able to describe the various duties of individuals working in the police department.	Blacksmith Dog Warden Institutional guard Patrolman Public Relations Worker Public Safety aide Private Duty Policeman Radio Dispatcher Traffic Man	Pre-Test Role-playing of policemen and their role in the community Bulletin Boards Post test(same as pre-test)	The student will have a positive attitude toward self, others, and work. The student will be aware of the many public service jobs available in the city of Cleveland.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: PUBLIC SERVICES- POLICE DEPARTMENT

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. Tottle, John In These United States and Canada Boston: D.C. Heath and Company 1965	Films: "Policeman" "Careers in Public Service"	Blacksmith Dog Warden Guard Institutional Patrolman Public Safety Aide	Contact: Cleveland Police Dept. 621-1234	Contact: Cleveland Police Dept. East 21st & Payne 621-1234	Brochures Flyers SRA Kits Popeye Career Comics (Public Service)

EVALUATION: Successful attainment of objectives 1, 2, and 3 will be based on (a) the ability of at least 80% of the students to orally identify and describe at least 7 out of 10 jobs performed in a police department, and (b) the ability of all students to orally identify 7 out of 10 pictures of pieces of equipment used by the police department. Student success on the post test will be based on the ability of 80% of the students to achieve a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

PUBLIC SERVICES - FIRE DEPARTMENT

General Discussion

Most communities have some form of a fire department. In small towns and rural areas a volunteer fire fighting company may exist. The volunteer firemen rush to the site of the fire when the alarm is sounded and they also work without pay. In larger towns, firemen are paid by the municipal government. In both cases, the firemen are concerned with putting out fires, preventing fires, and preserving lives and property.

In extinguishing fires some firemen may specialize in those caused by chemicals or electricity. Some firemen specialize in looking for causes of fires before they happen. For this reason, public buildings such as theaters and factories are inspected for conditions that may cause fires. All firemen are concerned with the public's safety and for this reason take many courses in administering first aid. Educating the public about fire prevention and safety measures is also a part of the firefighter's job.

PUBLIC SERVICES - FIRE DEPARTMENT

PRE-TEST

True or False

1. Firemen sometimes give first aid. _____
2. Fire prevention is the job of the Health Department. _____
3. Firemen are not allowed to inspect private homes. _____
4. The need for firemen is decreasing. _____
5. A fireman cannot be promoted higher than captain. _____
6. Volunteer firemen serve with no pay. _____
7. Firefighting requires teamwork. _____
8. The commanding officer assigns jobs to firemen. _____
9. Firemen may inspect public buildings. _____
10. Between alarms, firemen may completely relax. _____

KEY

1.	T	6.	T
2.	F	7.	T
3.	F	8.	T
4.	F	9.	T
5.	F	10.	F

OCCUPATIONAL CLUSTER: Public Services
JOB FAMILY: Fire Department

GRADE: 5 Social Studies
TITLE: Unit VIII-Ohio
BASIC CONCEPTS: (1) Every occupation contributes to society.

(2) Some people specialize in their work to protect our health, home and property

(3) Special abilities may qualify an individual for an unusual job.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe the duties of various individuals working a fire dept. The student will be able to list some of the personal qualities and skills a fireman must have. The student will be able to explain the function of various pieces of equipment used by firemen.	Batallion Chief Fireman High and Low Tension Man Lineman Helper Rescue Squad	Pre-test Students will bring in pictures for bulletin board. Role-playing (assign fire-fighter roles to students) Post test (same as pre-test)	The student will have a more positive attitude about the world of work and the importance of a fire dept. in a community The student will have some awareness of the importance of the fire dept. to their community.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: PUBLIC SERVICES- FIRE DEPARMENT

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text Preston, Ralph C Tottle, John In These United States and Canada Boston: D.C. Heath and Co. 1965	Films: "Fire Called Jeremiah" " Day with Fireman Bill"	Assistant Chief Batallion Chief Captain Fire Chief Fireman Lieutenant	Contact: Fire Station West 3rd & St. Clair Cleveland, Ohio	Contacts River Fire Boat 1801 Carter Rd. Station #2 or 21 621-1223 Main fire Department West 3rd & St. Clair Cleveland, Ohio	Pamphlets Brochures Flyers Popeye Career Comic (Public Services)

EVALUATION: The attainment of objectives numbers (1) and (2) will be based on the ability of at least 80% of the students to orally describe at least five different jobs performed by firemen, and to write or orally list at least three personal qualities or skills a fireman must have. Teacher rating of objective number (3) will be based on the ability of at least 80% of the students to visually identify 7 out of 10 pieces of equipment used by firemen. The attainment of post test objectives will be based on the ability of at least 80% of the students to achieve 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

General Discussion -Driving Occupations

The men at the wheel of the big trucks on highways and turnpikes are the top professional drivers. They drive the largest and most expensive equipment and receive the highest wages of all drivers. They are on their own practically all the time and have much responsibility. The work requires initiative, because they must transport goods of great value which must be delivered safely and on time.

Over the Road Truckdrivers

Over the road truckdrivers are top professional drivers. They drive the largest and most expensive equipment. They receive high wages also. Mostly they operate gasoline or diesal power tractor-trailers. These truckdrivers drive practically all of their working time. They must have the ability to maneuver the trailers while driving in reverse, when backing up big trailers to loading docks.

Local Truckdrivers

When the local truckdriver reports to work at the terminal or warehouse, he receives his assignment to make deliveries, pick-ups or both. He also receives the delivery forms needed. He checks his truck's condition. These truckdrivers load and unload the merchandise themselves at the customer's place of business.

Routemen

These truckdrivers sometimes called driver-salesmen or route salesmen are as much salesmen as they are drivers. They must, through their selling ability, increase sales and obtain new business by canvassing potential customers within their territories. Routemen drive panel or light trucks over an assigned route, selling and delivering goods, or providing services such as collecting and delivering laundry and dry cleaning to retail establishments (wholesale routemen) or directly to the public (retail routemen).

Since much of the food, clothing, and other products required by consumers is transported by trucks, the men who move these goods from terminals, warehouses, mines, and factories to wholesalers, retailers and consumers in the local area must be very skilled drivers, must have initiative, and they must also be able to handle heavy equipment in making deliveries. Some of these drivers must also have the necessary selling abilities required for increasing sales of their business.

PRE-TEST

Answer the ten questions using the three types of truckdrivers listed below.

1. Local Truckdrivers
2. Over-the-Road Drivers
3. Routemen--a. Retail
   b. Wholesale

1. _____must be able to maneuver big trucks or tractor trailers while driving in reverse, when backing up to loading docks.
2. _____are as much salesmen as they are drivers.
3. _____usually drive gasoline or diesel power tractor-trailers.
4. _____are top professional drivers, and drive the largest most expensive equipment.
5. _____receives his assignment to make deliveries, pick-ups or both.
6. _____must through their selling abilities increase sales.
7. _____checks the condition of his truck when reporting to work.
8. _____usually loads and unload the merchandise himself at the customer's place of business.
9. _____are sometimes called driver-salesmen or route-salesmen.
10. _____sells and delivers goods directly to the public.

Key

1.	2	6.	3
2.	3	7.	1
3.	2	8.	1
4.	2	9.	3
5.	1	10.	3a

OCCUPATIONAL CLUSTER: Transportation
JOB FAMILY: Land Transportation (Motor-freight)

GRADE: 6 Social Studies
TITLE: Unit X - The Americas in a Changing World
BASIC CONCEPTS: (1) Changes and conditions in the world affect careers.

(2) Any career has levels of responsibility.

(3) The Cleveland community provides many opportunities for individuals to develop skills and responsibilities in the area of land transportation.

(4) Every occupation contributes to society.

(5) The goods made in Cleveland and the world goods coming through the Port of Cleveland can be delivered by truck to half the population of the nation.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe the duties of individuals working in the area of Land Transportation (Refer to vocabulary list). The student will demonstrate his knowledge of motor-freight transportation jobs by successfully answering questions on the "Riddle Your Way" transportation game.	Freight Handlers Mechanic Over-The-Road or Long-Distance Truck Driver Route Salesmen Routemen Helper Truck Driver Truck Mechanic	Pre-test Discuss driving occupations with class. The students will give oral reports on various motor-freight jobs. Students will set up mock Trucking Firms using toy trucks. Each student will play role of workers in the trucking industry (truck driver, mechanic, etc.). Game: Riddle Your Way (Questions and riddles dealing with the trucking industry) Post test (same as pre-test)	The student will have a better knowledge of transportation facilities in and out of the city of Cleveland. The students will be aware of special skills, work habits, and satisfactions of the occupations discussed. The students will illustrate a positive attitude toward the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: TRANSPORTATION-Motor Freight

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John In These United States and Canada Boston: D.C. Heath & Co. 1965.	Films: "Trucks and Trains" "Cities and Transportation Moving People and Goods" "Truck Driver"	Diesel Mechanic Route Salesmen Routemen Helper Truck Driver Truck Mechanic	Contact: White Motor Company East 79th & St. Clair	Contact: White Motor Company East 79th & St. Clair Cleveland, Ohio	Pamphlets Brochures SRA Kits Popeye Career Comics (Transportation)

EVALUATION: Successful attainment of objectives one and two will be based on the ability of at least 80% of the students to identify and describe in writing or orally at least 75% of the jobs listed in this Unit. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

TRANSPORTATION - SHIPS

General Discussion

Transportation employment offers a wide variety of interesting and rewarding careers requiring diverse skills and levels of experience as well as an opportunity for travel and adventure. There are 160,000 persons employed on the inland waterways, divided equally between those on boats and those on shore. Growth of the industry has been nothing short of fantastic. In terms of tonnage carried, inland waterways rank third behind railroads and pipeways. The importance of the waterways lies in the fact that they serve 38 of the 50 states with almost 95% of the population.

A typical crew includes the pilot who navigates the ship, engineers who are responsible for the operation and maintenance of the vessel's power, the mate, who assists the master pilot in the operations of the ship, and the deck hands who perform the manual tasks involved in running the ship. Officers are promoted from below as their knowledge and experience increases.

TRANSPORTATION - SHIPS

PRE-TEST

PART I True or False

1. Shipping employees work only on the ships. _____
2. Engineers pilot the ships. _____
3. Ship officers work their way up from the bottom. _____
4. Deck hands perform manual tasks. _____
5. The mate assists the pilot. _____

PART II Multiple Choice

1. The shipping industry is _____ a) growing, b) closing down c) only for men
2. Transportation of cargo by ship costs _____. a) more than it does by truck, train, or plane, b) just as much as it does by truck, train, or plane, c) less than it does by truck, train, or plane.
3. Engineers are responsible for the ship's _____. a) power, b) food, c) navigation
4. A ship's kitchen is called the _____. a) deck, b) crew, c) galley
5. Most ships on inland waterways are inspected by the _____. a) Navy, b) Army, c) Coast Guard

KEY

PART I	PART II
1. F	1. A
2. F	2. C
3. T	3. A
4. T	4. C
5. T	5. A

OCCUPATIONAL CLUSTER: Transportation
JOB FAMILY: Waterways

GRADE: 5 Social Studies
TITLE: Unit IV - Lands and People of the Northeast-Middle Atlantic States
BASIC CONCEPTS:
(1) The initial development of the northeast occurred because waterpower was available, seaports were advantageously located in relation to Europe and inland routes provided access to continental markets.

(2) Ships leaving the Port of Cleveland are instrumental in supplying goods and services to people of distant lands.

(3) People have many kinds of careers.

(4) Cleveland as the number one port in Ohio, carries Ohio's aspirations to be the nation's leading state in world trade.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to describe the various duties one might encounter while working on a ship. The students will be able to identify pictures and slides of employees at work on a ship. Using slides and pictures, the students will be able to describe the duties of certain individuals working on a ship.	Crane Operator Deckhand Longshoreman Machine Operator Marine Attendant Merchant Seaman Navigator Ship Engineer Ship Mate Ship Pilot Shipping Clerk Signal Man	Pre-test Given newspapers and magazines students will make bulletin boards on Transportation on Waterways. Students will prepare and deliver oral reports on area of interest. Students will play games: Spin a Job, Travel connections, Riddle Your Way. (Developed by DVEP Office) Post test (same as pre-test)	The student will be more aware of the various careers that involve the movement of goods and services on our waterways. Students will be aware of the influence of the shipping industry in the city of Cleveland. Students will demonstrate a positive attitude toward the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: TRANSPORTATION-WATERWAYS

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John In These United States and Canada Boston: D.C. Heath and Co. 1965	Films: "Sea Port" "Transportation by Inland Waterways" "Cleveland World Port"	Crane Operator Deck Hands Longshoreman Machine Operator Signalman	Contact: Cleveland World Port Cleveland, Ohio 241-8004	Contact: Cleveland Port Authorities, Public Relations Representative 241-8004	Pamphlets (Ship Yard) Brochures SRA Kits Career Comic Books (Popeye and Transportation careers)

EVALUATION: Successful attainment of objectives one, two and three will be based on the ability of at least 80% of the students to orally describe at least seven jobs performed on a ship.
Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

LAND TRANSPORTATION - BUSES

General Description

Buses transport millions of Americans to and from work, schools, and homes each day. These buses follow definite time schedules and routes over city and suburban streets to get passengers to their destination.

The bus driver is responsible for the safety, comfort and convenience of his passengers. For these reasons a bus driver is usually hired on the basis of his driving record, skill and courtesy. While the bus driver runs a safety check on his vehicle before it leaves the terminal, the maintenance department has already checked it over with the aid of the equipment electrician. The bus has also been washed and cleaned. To assist inter-city drivers, baggage clerks and hostlers aid in assuring the passengers' comfort.

PRE-TEST

1. What is the name of the bus system in Cleveland, Ohio?
2. Circle the three jobs which can be performed with the bus system.
   (a) Bus driver (b) Mechanic (c) Body repairman (d) Traffic Checker
3. The bus mechanic repairs _____. (a) lights (b) buses (c) cars (d) tractors
4. The bus driver plays an important part on buses. True or False
5. A baggage clerk may load luggage. True or False
6. A bus driver must have a definite route. True or False
7. Describe the duties of a hostler. _____
   _____
8. Circle the two commercial buses. (a) C.T.S. (b) Greyhound (c) Rapid
9. How does the Greyhound bus differ from Cleveland Transit System buses?
10. Describe a trip taken by bus with family or friends.

OCCUPATIONAL CLUSTER: Transportation
JOB FAMILY: Land Transportation (Buses)

GRADE: 5 Social Studies
TITLE: Unit IV - Lands and People of the Southern and North Central States
BASIC CONCEPTS:

(1) A man's occupation is often influenced by the geography of a region.

(2) A large number of people in the city of Cleveland depend on bus drivers for transportation to and from job sites, delivery of goods and services, pleasure trips, etc.

(3) Cleveland is the center of a transportation complex that daily moves a population of more than 116,000 to and from their jobs.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
After viewing pictures of special uniforms or apparel worn by workers discussed in this unit, the students will be able to identify the specific occupations of the workers. After viewing films and visiting a bus terminal, the student will be able to describe the duties of individuals working in the area discussed.	Baggage Clerk Body Repairmen Bus Driver Electrician Hostler Mechanic Parts Counterman Traffic Checker	Pre-test Make Bulletin Boards Role-play Individual Reports Post Test (same as Pre-test)	The student will have improved their knowledge of the transportation cluster and specific jobs in the cluster The student will be more aware of various occupations in his community.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: TRANSPORTATION - Buses

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John In These United States and Canada	Films: "Careers in Transportation"	Baggage Clerk Buses Clerical Driver Equipment Electrician Hostler Janitor Maintenance Service Man Signal Mechanic Substation Telephone Operator Washer and Cleaner	Contact: Charter Service Dept. Cleveland Transit System	Contact: Cleveland Transit System Greyhound Bus Terminal Euclid Avenue Cleveland, Ohio Rapid Transit Station Fairhill Road and Cedar	Pamphlets Brochures SRA Kits Popeye Career Comics

EVALUATION: Successful attainment of objectives one and two will be based on the students' ability to orally describe at least 70% of the jobs listed and discussed in this Unit.
The attainment of post test objectives will be based on the ability of at least 80% of the students to achieve a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

TRASPORTATION - RAILROADS

General Dicussion

The railroad with its network of more than 20,000 miles of rail line reaching into all parts of the country, was one of the nation's largest employers. Over 500,000 railroad workers were employed in 1968, operating trains, looking after the needs of the traveling public, maintaining and repairing facilities and equipment and performing the hundreds of other activities required in this industry. These activities offer a great variety of interesting careers requiring different kinds of skills and levels of education.

In most railroad occupations, a worker starts at the bottom and works his way up by learning his job, proving his ability and acquiring the seniority which will enable him to advance.

TRANSPORTATION - RAILROADS

PRE-TEST

PART I True or False

1. A Yard Clerks' duties consist of writing, filing, and calculating records and accounts. _____

2. A Fireman's duties entail calling signal indications, relaying hand signals, orders and messages. _____

3. Communications and Signal Helpers build, maintain and repair railroad freight and passenger cars. _____

PART II Multiple Choice

1. The person responsible for the maintenance, repair and construction of track, ties, switches, fences and anything pertaining to railway. _____ a) Firemen, b) Trackman, c) Carmen, d) Machinist

2. This person's responsibilities include scheduling the use of block tracks, interlocking switches and signals to ensure proper movement of the trains. a) Block Operator, b) Boilermaker, c) Policeman, d) Fireman _____

3. This person's responsibilities are building, maintaining and repairing railroad, freight, and passenger cars. _____
a) Mechanic, b) Carman, c) Trainmen, d) Machinist

4. This person assembles and dismantles equipment, replaces and repairs parts. _____ a) Machinist, b) Trackman, c) Yard Clerk, d) Signal Helper

5. This person's duties consist of writing, filing, and calculating record and accounts. _____ a) Yard Clerk, b) Secretary, c) Bookkeeper, d) Carman

6. This person's duties involve installation, maintenance, repairing and testing and communication and signal equipment. _____
a) Electrician, b) Repairman, c) Fireman, d) Communication and Signal Helper

7. This person's duties consist of construction, maintenance and repairing of tunnels, bridges, stations, and railway shops. _____
a) Boilermaker, b) Yard Clerk, c) Bridge & Building Workers, d) Trackman

TRANSPORTATION - RAILROADS

PRE-TEST KEY

TRUE OR FALSE

1. True
2. True
3. False

MULTIPLE CHOICE

1. B-Trackman
2. A-Block Operator
3. B-Carman
4. A-Machinist
5. A-Yard Clerk
6. D-Communication & Signal Helper
7. C-Bridge & Building Workers

OCCUPATIONAL CLUSTER: Transportation
JOB FAMILY: Transportation by Rail

GRADE: 5 Social Studies
TITLE: Unit III - A New America Grows Up
BASIC CONCEPTS:

(1) Since the middle of the Nineteenth Century, the city of Cleveland has grown in population, in area, in productivity and in common national purpose.

(2) Careers require different knowledge, abilities and attitudes.

(3) Cleveland is a vital link in the railroad system which bend together the industrial heartland of America.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify and describe duties of various individuals discussed in this unit. The student will be able to describe the sequence of operations involved in the distribution of a familiar commodity by rail.	Black operator Bridge and Building-workers Car-men Communication and Signal Helper Firemen Machinist Trackmen Yard Clerk	Pre-test Students will give reports on jobs they think they would like to do in the railroad industry. Students will bring in newspaper clippings of different jobs available in the railroad industry. Students will draw pictures of different jobs available in the railroad industry. Post test (same as pre-test)	The student will have a better understanding of transportation workers and their duties. The student will have some knowledge of the levels of responsibility attached to any job family.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: Transportation-Transportation by Rail

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John In These United States and Canada Boston: D.C. Heath and Co. 1965	Films: "Railroad Builders" "Transportation by Freight Trains"	Black Operator Bridge and Building Workers Car-men Communication and Signal Helper Firemen Machinist Trackmen Yard Clerk	Contact: Penn Central Railroads Terminal Tower	Contact: Penn Central Railyard Rapid Transit Station	Pamphlets Brochures SRA Kits Popeye Career Comics (Transportation) Occupational Outlook Handbook

EVALUATION: Successful attainment of objectives one and two will be based on the students' ability to orally describe or identify at least eight out of ten jobs associated with transportation by rails. Student success on the post test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

OCCUPATIONAL CLUSTER: Transportation
JOB FAMILY: Air Transportation

GRADE: 5 Social Studies
TITLE: Unit IX - Land and People of the Western States
BASIC CONCEPTS:

(1) Cleveland is an important center for air transportation.

(2) More and more people fly from place to place, and the air freight business is rapidly growing.

(3) Airports are gateways for people as well as goods.

(4) Every career requires some special preparation.

(5) Careers require different knowledge, abilities and attitudes.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The student will be able to identify personnel by their uniforms. The student will be able to state the name and location of the two major airports in the city of Cleveland. The students will be able to list some of the common and uncommon uses of aircraft. Using the Spin a Job game, the student will be able to correctly identify the job selected.	Airline Dispatcher Air Traffic Controllers Co-pilot Flight Engineer Ground Radio Operators Line Maintenance Mechanic Maintenance Base Mechanic Pilot Ramp Serviceman Reservation Clerk Sky Cap Stewardess Ticket Agent	Pre-test Students will make model planes. Visit Control Tower at Burke Lakefront Airport or Cleveland Hopkins Airport. Students will make bulletin board using pictures of various types of aircraft. Post test (same as pre-test)	The student will be aware of the many people necessary for operation of an airport. The student will be aware of the many services provided by the nation's airports (Pleasure and business). The students will have some knowledge of the special preparations needed for the various careers discussed. The students will be more aware of the world of work.

INSTRUCTIONAL AND RESOURCE MATERIALS — OCCUPATIONAL CLUSTER: TRANSPORTATION-Air Transportation

TEXT	FILMS AND FILMSTRIPS	SOUND SLIDES DEVELOPED BY DVEP OFFICE	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Basal Text: Preston, Ralph C. and Tottle, John. <u>In These United States and Canada</u> Boston: D.C. Heath and Co. 1965.	Films: "Airplanes and How They Fly" "Airplanes Work for Us"	Airplane Pilot and Co-pilot (seated in plane) Cleveland Hopkins Airport Control Tower	Contact: Public Relations American Airlines 861-82? or United Airlines Public Relations Dept.	Contact: Burke Lakefront Airport Cleveland Hopkins Airport	Pamphlets (Airports) Brochures SRA Kits Popeye Career Comics (Transportation)

EVALUATION: At least 85% of the students will be able to name and locate the two major airports in the city of Cleveland and orally identify pictures of seven out of ten airport personnel workers in their work uniforms.
All students will be able to cite at least three common and three uncommon uses of aircraft. Students will also be able to identify 70% of the jobs listed in this Unit.
Student success on the post-test will be based on at least 75% of the students achieving a 10% accuracy increase over their initial scores on the pre-test.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

APPENDIX

DEVELOPMENTAL VOCATIONAL EDUCATION

Quincy-Woodhill Building
229-5310

Available Materials

Audio Visual Equipment

4	34 MM Cameras
3	Cassette Recorders
2	16 MM Projectors
3	Overhead Projectors
18	Sound-slide Projectors
1	Sound Filmstrip Projector

16 MM Films

Careers in Transportation	Careers in Skilled Services (Sales)
Money in the Hand and Out	Careers in Personal Services
Horizons Unlimited (Health Careers)	Careers in Industry
Building a House	Careers in Business & Office Occupations
The Joys of Selling	The City
Seaport	Our City Government
Careers in Machine Trades	Trucks in Our Neighborhood
Careers in Building Trades	Dairy: Farm to Door
Careers in Communication	Postman: Rain or Shine

Filmstrips

Who Are You?	Television
How Do You Get There?	The Newspaper
What Do You Like To Do?	The Telephone
What is A Job?	Books
What Good Is School	Communicating Ideas
Motion Pictures	Communicating Without Words
Radio	

Filmstrips Cont.

Conservation For Today's America (Series With Sound)

(a) Land Conservation Today

(b) Water Conservation Today

(c) Urban Conservation Today

(d) Wildlife Conservation Today

(e) Mineral Conservation Today

(f) Forest Conservation Today

(g) Soil Conservation Today

Sound-Slides

Airport

Railroad

Post Office

Police Department

Fire Department

Newspaper

Bus

Radio

Television

Ships

Home Economics

Posters

Business and Office

Manufacturing

Fine Arts & Humanities

Marine Science

Marketing & Distribution

Environmental Control

Hospitality and Recreation

Agri-Business & Natural Resources

Communication

Transportation - Ships

Manufacturing - Apparel

Health Services

RICHARD'S ROSEN PRESS

Careers in Depth Series Cont.

Journalism
Landscape Architecture
Law Enforcement
Librarian
Marines
Marketing
Medical Assisting
Medical Technology
Merchant Marine
Meteorology
Minister
Model
Museums
Music
NASA
Naval Architecture
Navy
Nuclear Energy Fields
Nun
Nursery Industry
Nursing
Occupation Therapy
Oceanography
Optician
Optometry
Own Business
Personnel Work
Physics
Pilot
Pharmacy
Photography
Physician
Printing
Public Relations
Rabbi
Radiologic Technology
Railroading
Real Estate
Retailing
School Psychology
Secretary
Shorthand Reporter
Social Work
Television
Temporary Office Worker
Traffic Management
Translating and Interpreting

JULIAN MESSNER SERIES

Your Career in Advertising
Your Career in Aerospace Industry
Beauty As A Career
Careers in Biological Science
Your Career in Chemistry
Your Career in Civil Service
Your Career in Computer Programming
Disease Detectives
Engineers Unlimited
Guide To Professional Careers
Fashion as a Career
Your Career in Film Making
Your Career in Foreign Service
Careers in the Health Field
Careers for Home Economists
Careers in Horticultural Sciences
Careers in Hotel Management
Your Career in Interior Design
Your Career in Journalism
Your Career in Law Enforcement
Careers in the Legal Profession
Careers in the Library World
Your Career in Medicine
Your Career in Nursing
Your Career in Oceanology
On The Job Training
Your Career in Parks & Recreation
Your Career in Public Relations
Your Career in Selling
Skyblazers
Social Service
Stagestruck (Theatre)
Your Career in Teaching
The Teen-Age Diet Book
Your Career in Transportation
Your Career in the World of Travel
Your Career in TV and Radio
What About Teen-Age Marriage?
You and Today's Troubled World
Your Career-If You're Not Goint to College
Your College Education-How to Pay for It
Your Handicap-Don't let it Handicap You
Your Personality and You

SRA Book Series

I. Our working world- Families at work (text and records)
Our working world - Cities at work
Our working world - Neighbors at work

II. Educational filmstrips and records
A. Conservation for today's america
(4 records and 4 filmstrips)

III. Career Opportunities
New York Life Insurance Company
Box 51, Madison Square Station
New York, N.Y. 10010 1958
(a series of articles designed to help guide young people to a better future)

Career Development Resource Materials

1. Occupational Exploration Kit
   Science Research Assoc. (Sr. High)
   259 W. Erie St.
   $99.50 (approx price)

2. Language Development Kit

3. Work (Widening Occupational) Kit

Note: (The above are available at the Visual Aid Center and the Cleveland Public Library)

Popeye Career Comics
King Features
235 E. 45th St.
N.Y. N.Y. 10017

Occupational Library, Chronicle, Moravia, N.Y.
Based on D.O.T.
DVEP Office

People and Choices Career Folios (Bernard C. Watson professor and Chairman Urban Educ. Temple University)
Division of Urban Education
a program to acquaint pre-high school students with career possibilities
Harcount Brace Jovanovich, Inc. N.Y.

Sound Filmstrips

Guidance Association of Pleasantville, N.Y.

I People who help others

Filmstrips:

A. Physical Theropist
B. Day care worker
C. Community Organizer
D. People who help others

II People who work in science

Filmstrips:

A. People who work in science
B. Recording Engineer
C. Laboratory Technician
D. Ocean Life Scientist

III People who make things

Filmstrips:

A. People who make things
B. Aircraft assembler
C. Chef
D. Model builder

IV People who create art

A. People who create art
B. Puppeteer
C. Musician
D. Designer

V People who influence others

Filmstrips:

A. People who influence others
B. Model (homemaking)
C. Creative director (art)
D. County agent (horticlture)

VI People who organize facts

A. People who organize facts
b. Bakery fore-woman
C. Automotive researcher
D. TV sports editor

ADDITIONAL MATERIALS AVAILABLE IN THE

DEVELOPMENTAL VOCATIONAL EDUCATION OFFICE

I. Posters:

1. They set their sights on careers at sea
2. Leisure and restaurants
3. Where people work
4. Trades and industrial
5. Home economics
6. Business education - General

II. Tapes (the world of work)

1. On the job (20tapes)
2. Getting a job (20 tapes)
3. Cross - Vocational skills and information (20 tapes)

III. Games

1. Travel Connection
2. Transportation
3. Riddle your way

DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

VISUAL AIDS LIST

Careers in the Building Trades. 26 Minutes

Easy-to-follow language and lively action demonstrate some of the tasks carried on in the various trades practiced by the largest group of skilled workers in the nation.

Careers in Business and Office Occupations. 25 Minutes

Helps youngsters develop an understanding of what is required in office occupations. A number of these occupations were unknown only a few years ago.

Careers in Communications. 30 Minutes

What do workers in this essential area do? The film gives a close-up look at various opportunities available and some of the skills and talents required.

Careers in Industry. 26 Minutes

Ranges over some of the many opportunities American industry provides with a closer look at some specific occupations. It also emphasizes importance and satisfactions of jobs in this area.

Careers in Machine Trades. 29 Minutes

Portrays some of the skilled trades involving use of powerdriven machinery. The program relates the occupation to young people's own interests and future.

Careers in Personal Services. 29 Minutes

Looks at the jobs of those, from firemen and policement to beauticians and barbers, who want to work with people. It demonstrates their role in making life safer and pleasanter.

Careers in Sales--"The Joys of Selling". 26 Minutes

Every industry, business, and community employs sales people. So, the variety and opportunities are limitless. The film explores some of the directions young people with a bent for selling can follow.

Careers in Skilled Services. 25 Minutes

The people who install, maintain, and repair automobiles and machinery in homes, offices, and factories keep the nation running. The program shows some of the talents and skills used in a wide field with a shortage of trained personnel.

Careers in Transportation. 24 Minutes

These workers help move passengers and goods over highways, railways, airways, and seaways across continents and oceans, or inside cities and communities.

How Do You Get There. 26 Minutes

Here are the tips youngsters need on how to start looking for a job--newspaper ads, employment agencies, etc; how to apply and how to approach an interview. There is also information on technical courses at two-year colleges, apprenticeships, and on-the-job training.

Airplanes Work for Us. 11 Minutes

Depicts some of the common and uncommon uses of aircraft, pointing out that in addition to the carrying of passengers and freight, airplanes and helicopters are used for fire patrol, rescue work, weather patrol, construction of power lines and crop dusting. Describes air to ground communication and shows many auxiliary jobs other than the actual piloting of aircraft.

Building a House. 11 Minutes

Shows the main stages in building a house and pointing out the importance of each workman's special skill in following the architect's plans.

The City. 11 Minutes

Features a complex modern city with private homes, apartments, office buildings, schools, stores, and factories. Pictures the major transportation facilities, the huge suburban sprawl, the city's elected governmental body, and the city departments such as the fire and police departments.

Dairy Farm to Door. 11 Minutes

Presents the story of milk production and processing showing views of the dairy farm, the creamery, the distribution of processed milk and other dairy products to the home and market.

Exploring the Ocean. 11 Minutes

Uses drawings, diagrams, animation, and photographs of the ocean floor to reveal the wealth of the ocean in minerals as well as in plant and

animal life. Shows the work of oceanographers and describes the part played by the water cycle in depositing minerals in the ocean.

Industry. (filmstrip)

Discusses the growth and importance of industry in New England and describes various industries such as shoes, textiles, hardware, paper hats, silverware, firearms, electronics and others.

Money in The Bank and Out. 15 Minutes

Explains how a bank helps the community by keeping money in circulation and explains such procedures and terminology as deposits, checks, interest, loans, and money flow.

Our City Government. 10 Minutes

Views the urban community and its government. Considers how a city government provides services and makes and enforces laws. Discusses the functions of the city council, mayor or city manager, and courts.

Postman: Rain or Shine. 11 Minutes

Follows a letter from the time it is mailed in Kansas until it is delivered in California, describing the role of trains, trucks, planes, and the postman. Shows the use of automation in the post office.

Seaport. 16 Minutes

Gives an insight into the seaport area of a large city and such activities as loading and unloading of cargo, hiring of seamen, varied types of work and workers, and making a ship seaworthy for another trip.

Transportation. (filmstrip)

Illustrates the different types of transportation needed, including railroads, airlines, buses, automobiles, boats, and pipelines.

Trucks in our Neighborhood. 12 Minutes

Shows many kinds of trucks and how they work to help the neighborhood.

Communication: Books. (filmstrip)

Explains how a book is published and distributed and shows the role that libraries play.

Communication: Communicating Ideas. (filmstrip)

Points out that men in all societies have ways of communicating with each other and emphasizes that our modern society works because we have easy, rapid, and reconizable systems of communication.

Communication: Communicating Without Words. (filmstrip)

Illustrates some of the ways in which we communicate without words, including gestures, pictures, sounds, touch, signs and symbols, odors and appearance.

Communication: Motion Pictures. (filmstrip)

Explains how motion pictures are produced and discusses the motion picture as a particular type of communication.

Communication: Radio. (filmstrip)

Explains the importance of radio to people, businesses, and city agencies.

Communication: Television. (filmstrip)

Explains how television programs are produced and why television is important to people.

Communication: The Newspaper. (filmstrip)

Explains why newspapers are important and how they are produced.

Communication: The Telephone. (filmstrip)

Explains how the telephone establishes a network of communication that ties us in a city, across the country, and around the world.

Conservation for Today's America. (filmstrip)

Contains: soil, forest, water, wildlife, mineral, urban, and land conservation today.

STUDENT TOURS OF OFFICES

Attached is a list of companies which will accommodate students for tours of offices. When making arrangements in writing or by phone, it would be helpful if you would include the following information:

1. Make sure the date and time of the tour is accurate.

2. Ask your contact to furnish you with orientation information on the company so you can conduct an orientation session on the company before the tour. This information could include: brief company history; product or services; production processes; annual sales, payroll, profit, dividends, and taxes; employment of men and women in the plant and offices, product use and markets etc.

3. Give the person who is arranging the tour as much advance notice as possible. Two weeks notice is not uncommon.

4. Give the number of students who will be on the tour and the name or names of the teachers or other supervisory persons who will accompany the students. Remember most companies have a limit on the number of people they can accommodate.

5. Get the consent of your principal and the parents of the students.

6. Remind your students to ask pertinent questions and have one or more students react by making favorable comments to the company representatives at the end of the tour.

7. Have students write "thank you" letters.

STUDENT TOURS OF OFFICES IN THE CLEVELAND AREA

Company and Address	Person to Contact	Special Information
Eaton Corp. 100 Erieview Plaza Cleveland, Ohio 44114	Mr. Leonard C. Jarvis Office Services Manager 523-5356	
The Standard Oil Co. Midland Building Cleveland, Ohio 44115	Mr. Andrew Molnor Employment Director 575-5948	
National Acme Corp. East 131 St. & Coit Rd. Cleveland, Ohio	Mr. Walter Bandlow Training Director 268-4200 Ext. 460	
The East Ohio Gas C. East Ninth & Superior Cleveland, Ohio 44113	Mrs. Marilyn Mize Public Relations Dept. 522-2949	Tour hours: 10 a.m. to 2 p.m. Tour includes three key departments: Energy Control Center, Customer Information and Data Processing
The Plain Dealer 1801 Superior Avenue Cleveland, Ohio 44114	Miss Genevieve Mohlor Promotion Dept. 523-4245	Tour includes: City Room, Company Room, Engraving Department, Stereotype Department, Press Room and wire Library
The Penn. Mutual Life Ins. Co. 33 Public Square Building Cleveland, Ohio 44113	Dorothy York Office Manager 861-7780	
New York Life Ins. Co. 55 Public Square Cleveland, Ohio 44113	Miss Frances Shinn Office Manager 969-2610	
Sears Roebuck and Co. 8501 Carnegie Avenue Cleveland, Ohio 44106	Mr. Earl D. Ellis Director of Urban Affairs 795-2233 Ext. 346	
The Buckeye Union Ins. Co. Rockefeller Building 614 Superior, West Cleveland, Ohio	Miss Christina Greive 861-660	

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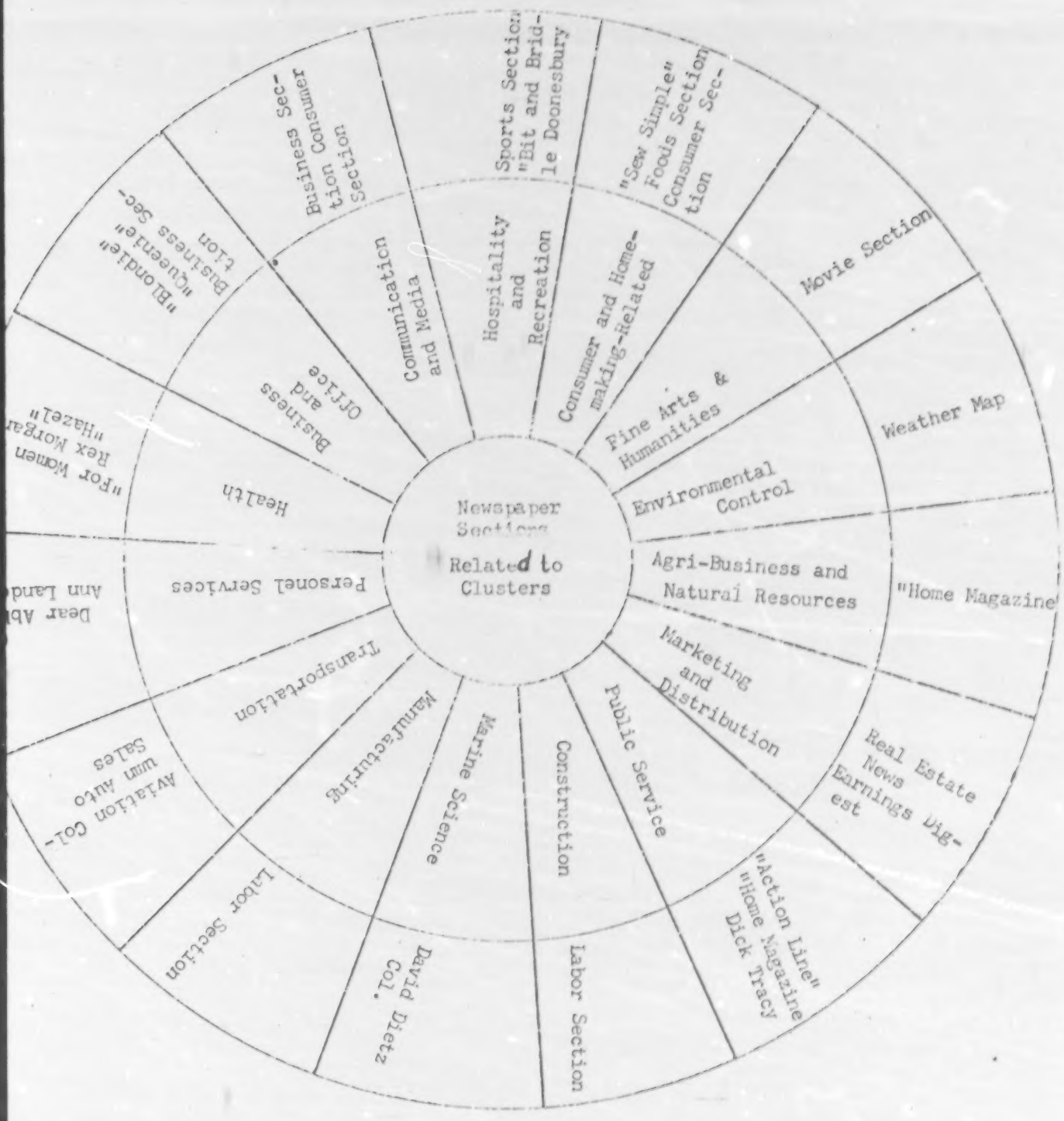
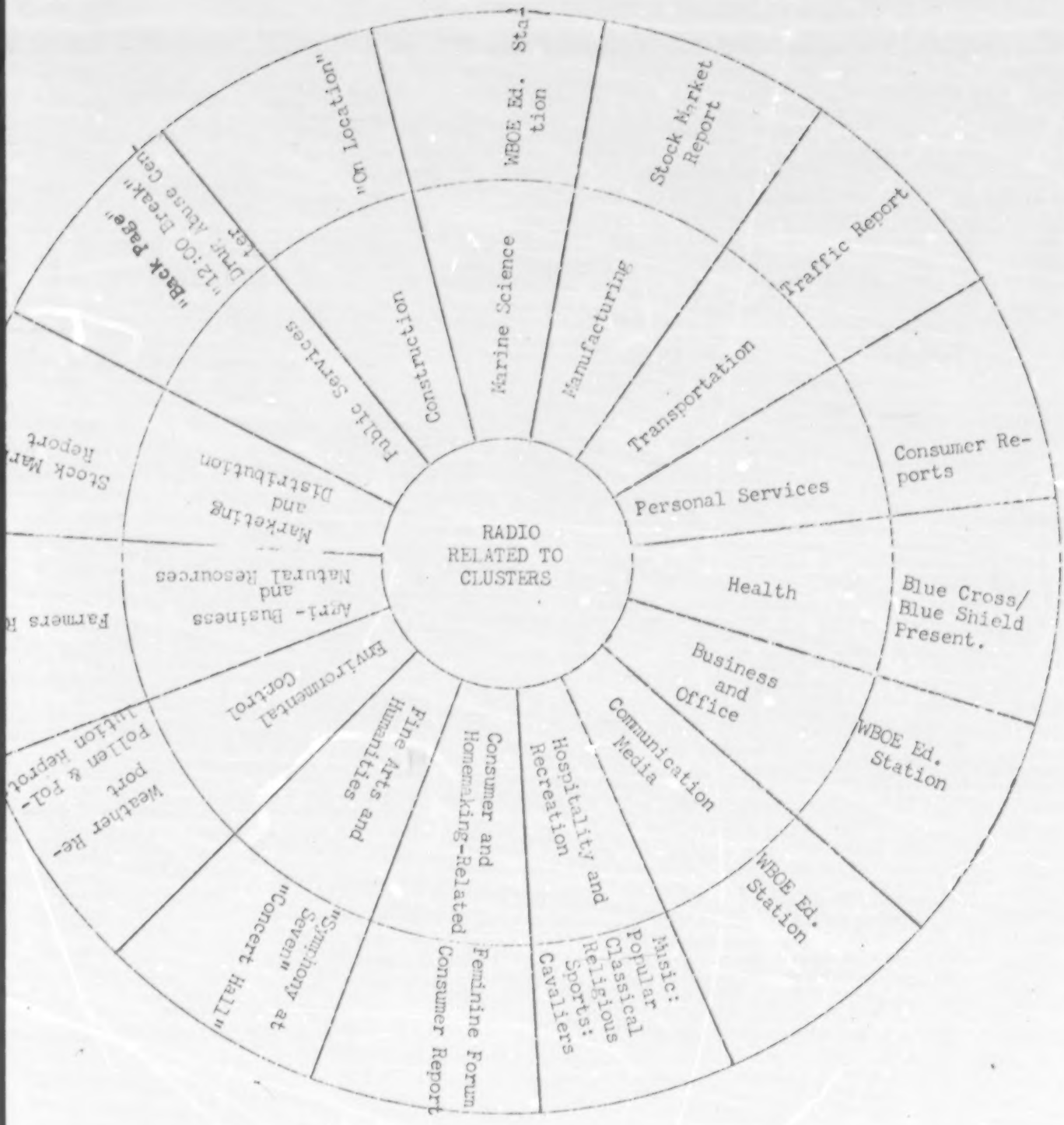
Company and Address	Person To Contact	Special Information
Glidden Durkee Div. Union Commerce Building East Ninth & Euclid Cleveland, Ohio	Miss Norma Thompson Employment Supervision 771-5121	
Federal Reserve Bank P.O. Box 6387 Cleveland, Ohio 44101	William Idsardi Public Information Director	Tours scheduled at 9:30 a.m. and 1:30 p.m. No more than 25 persons
The Cleveland Press 901 Lakeside Avenue Cleveland, Ohio 44114	Mr. Glen Rynearson 623-1111 Ext. 630	Tours scheduled at 9:30 a.m. and 1:30 p.m. Size of group-minimum-10, Maximum-25. Length of tour - 45 minutes.
The Warner & Swasey Co. 5701 Carnegie Avenue Cleveland, Ohio 44103	John Krisko Training Coordinator 431-5580 Ext. 304	Tours scheduled at: 9:30 a.m. to 11:00 a.m. Tour includes: orientation, plant offices, maximum - 10
Travelers Ins. Co. 1801 East Ninth St. Investment Plaza Cleveland, Ohio 44116	Marilyn Walton Personnel Assistant 241-4646 Ext. 302	
Harshaw Chemical Co. 1945 E. 97 St. Cleveland, Ohio 44106	Miss Doris Smith Manager of Research Administration	Tour includes: Computer center, office publicity, Magnetic Card Typewriter
Ford Motor Co. P.O. Box 9868 Cleveland, Ohio 44101	Mr. Richard A. Weiss Supervisor of Personnel 433-7000 Ext. 473	
The Geo. Worthington Co. P.O. Box 6028 Cleveland, Ohio 44101	Betty Urban 241-1600 Ext. 226	Will accommodate 10-15 students

Company and Address	Person To Contact	Special Information
Allstate Insurance 75 Executive Parkway Hudson, Ohio 44236	Jane Van Almen Personnel Manager 656-6120	
Addressograph-Multigraph 1200 Babbit Road Euclid, Ohio 44117	J.W. Fulton 731-8000 Ext. 418	

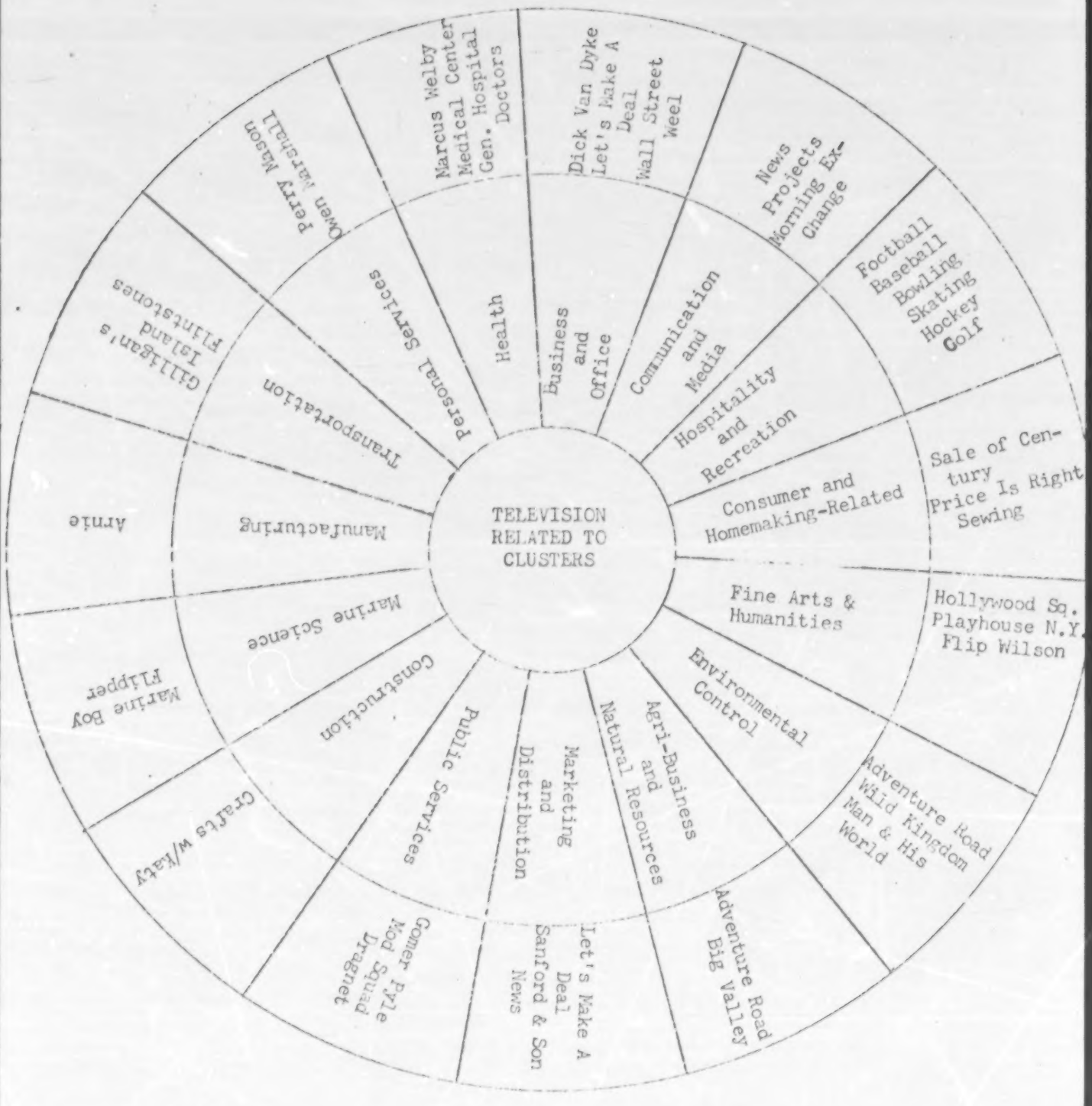
NEWSPAPER SECTIONS RELATED TO OCCUPATIONAL CLUSTERS



RADIO PROGRAMS RELATED TO OCCUPATIONAL CLUSTERS



TELEVISION PROGRAMS RELATED TO OCCUPATIONAL CLUSTERS



BIBLIOGRAPHY

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C.

This handbook is a guide to employment opportunities in a broad range of occupations that covers all the principal areas of work. It brings together information of significant for those who are planning a career. Service as a basic tool in the vocational guidance process. We use this guide to gather comprehensive information on career opportunities.

Career Opportunities
New York Life Insurance Company
Career Information Service
Box 51, Madison Square
Station New York, N.Y. 10010

Soft back book composed of a series of articles designed to help guide young people to a better future. These books are easy reading material. They are used as a part of our careers library. We fine it good in that our students can easily relate to it, each article is based on the experience of one who has distinquished himself in his respective field.

English On The Job
Jerome Carlin
Globe Book Company, Inc.
New York 10 New York

This book capitalizes upon that interest by organizing the English activities around a core of vocational guidance. We use it because it not only improves the students' English expression, but it also helps them gain insight into some of the problems facing them. The students' learning proceeds simultaneously in two directions: A better understanding of his potentialities in the world of work, and a better command of the communication skills needed in all phases of everyday living.

The Story Steel
United State Steel Corporation
600 Grant Street
Pittsburgh, Pa. 15219

A pamphlet style book which describes how steel is made. We use it to stress the importance of steel, it takes you from smelting of metals in prehistoric through the fascinating development of the iron making processes.

Careers In Depth
Richards Rosen Press

This series covers all the careers in practical terms for the young man or woman who is interested in more than just a job. All books were written by prominent men and women who are successful in their chosen fields.

Handbooks Of Job Facts
Scientific Research Associates

An occupational summary which helps to pinpoint the basic features and trends of a variety of significant occupations, contains concise summaries of basic data on 300 major occupations.

Industrial and Commercial Wiring
Kennard C. Graham
American Technical Society - Chicago, USA

This book has been rewritten to reflect the latest developments in the electrical field covering new techniques and materials, and incorporating the latest additions and changes in the National electrical code. It's especially good that it begins with basic lighting terms and principles. Study guide also accompany the book.

Electrical Construction Wiring
Walter N. Alerick
American Technical Society
Chicago, Ill. 60637

This book includes the latest accepted changes in wiring, also the more traditional wiring procedures that are still recognized by the NEC. The text is very suitable for self study. Questions are found at the end of each chapter for personal check up, classroom discussion, or assignments. They are designed to reinforce the information given in the chapter and to aid in giving directions for the review of the material in the chapter.

Related Mathematics For Carpenters
L.S. Chamberlain
American Technical Society

This book deals with mathematics as it relates to a practical occupation. The authors teaching experience demonstrated that students found it easy to learn mathematics when the materials consisted of realistic problems such as one might encounter on a job.

Automotive Maintenance and Trouble Shooting
Leslie F. Coings and Edward D. Spicer
American Technical Society
Chicago, 60637

This hard back book is based upon three main objectives (1) To show how to prevent most troubles, (2) to find out how to quickly and adequately locate the cause of any trouble, (3) once it is known what is wrong, to show how to restore the care to satisfactory operations.

The Epic of Steel
United State Steel
Public Relations
100 Erieview Plaza
Cleveland, Ohio 44114

This is a resource book used to get more detailed information about the steel industry.

Your Future In Daily Newspapers

This is easy to read material describing the jobs in the newspapers field. It is used as a part of our career library.

Hospitality Program
(Food Service & Lodging Ed.)
Council on Hotel, Restaurant and
Institutional Education (1970)
1522 K. Street, N.W.
Washington, D.C. 20005

This book is used to gain information in the area of good service and lodging. It explains the requirements one needs if he or she is interested in managing a large hotel or motel. It also explains how one might go about getting into the areas of food catering.

Health Careers
The Greater Cleveland Hospital Association
1001 Huron Road
Cleveland, Ohio 44115

This guide provides minimum basic entry information about allied health education programs in Northeast Ohio. We have used this booklet as a reference tool for seeking information about an approved health career program. It explains in detail the jobs available, the requirements, the grants available and suggested places for training.

Aim High Vocational Series
Richards Rosen Press, Inc.,
New York, New York

The Aim High Vocational Guidance series is for the young person who is looking for a job. All of the books are written by experts in the occupations who know what the jobs are about. The series covers occupational opportunities for young people and will help them to make decisions concerning them.

A Guide To Professional Careers
Walter Duckat
Julian Messner, a division of Simon & Schuster Inc.
New York, New York 10018

This book is as it said a guide to professional careers. Many careers are mentioned in this book for college bound students. The requirements, training, duties, salaries and future outlook for each career are clearly detailed, with helpful cross references to other closely related professional careers. The book is unique in that each career description includes questions to determine the reader's interest in and capabilities for the profession.

How To Plan A House
G. Townsend & J. Dalzell

A multi purpose book written in a practical and authoritative manner. Designed to instruct the layman on house planning intelligently. The book is also written to be of value to builders, developers, apprentices and students wishing basic information on planning. The book provides an entire course in design in the residential field presenting plans, how plans are made, and factors involved in shopping plans.

Machine Shop - Operations & Setups
Porter Lascoe, & Nelson

A text written by professionals in the field, with the purpose of providing basic training in conventional machine operations and information regarding the lastest developments and machine book business. The book also provides the student with innovations which will be useful in the future using illustrations and language basic to the trainee.

Concrete Block Construction: For Home & Farm
J. Dalzell, Townsend

A guide written by professionals working in the field which carries the reader step by step through experience tested methods of erecting a structure designed to eliminate common errors in the use of concrete blocks, this book is filled with instruction valuable to the beginner as well as the mason inexperienced with the concrete block.

Steel Square
Townsend

A "How to do it" book with detailed instructions and illustrations for the carpenters or helper on the use of the steel square. The book is compiled in such a way as to explain lines and angles in a simple and practical manner answering questions from "what is a steel square" to "how to build a roof." A valuable book in any carpenter's handbook.